| | |
|---|---|
| **Source:** | **MCC**<br>john.meredith@etsi.fr |
| **Title:** | **21.101 v2.4.0 for approval** |
| **Document for:** | **Approval** |
| **Agenda Item:** | **7.2** |

The attached Technical Specification details the specifications which will comprise 3G Release 1999. TSG SA is invited to approve it to be raised to version 3.0.0.

## Presentation of Specification to TSG or WG

| | |
|---|---|
| **Presentation to:** | **TSG  SA Meeting #7** |
| **Document for presentation:** | **TS 21.101 version 2.4.0** |
| **Presented for:** | **Approval** |

**Abstract of document:**

The specification lists those 3G Technical Specifications and Technical Reports which are included in Release 1999. It also explains the division of the specs into series, and the allocation of numbers within a given series.

**Changes since last presentation to SA Meeting #6 and subsequent attempt at approval by correspondence:**

General update of the TS/TR list. Elimination of the original clause 5 ("Content of 3G Release 1999") due to its instability.

**Outstanding Issues:**

None - though it would be desirable to re-instate clause 5 at some later stage.

**Contentious Issues:**

None.

# 3G TS 21.101 V2.4.0 (2000-03)

*Technical Specification*

## 3rd Generation Partnership Project;
## Technical Specification Group Services and System Aspects;
## 3rd Generation mobile system Release 1999 Specifications
## (3G TS 21.101 Release 1999)

| Reference |
| --- |
| 3TS/TSGS-0021101 |

| Keywords |
| --- |
| Architecture |

***3GPP***

| Postal address |
| --- |

3GPP support office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

http://www.3gpp.org

***Copyright Notification***

# Contents

# Foreword

This Technical Specification has been produced by the 3GPP.

This TS identifies the 3G system specifications for Release 1999.

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 this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version 3.y.z

where:

x   the first digit:

1   presented to TSG for information;

2   presented to TSG for approval;

3   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 specification;

# 1      Scope

The present document identifies the 3$^{rd}$ generation mobile system specifications for Release 1999. The specifications and reports of 3G Release 1999 have a major version number 3 (e.g. 3.x.y).

Release 1999 Technical Specifications and Technical Reports were functionally frozen at the 6$^{th}$ Technical Specification Group meetings (TSG#6) in December 1999.

> NOTE 1:  Functionally frozen means that no further functionality/features may be incorporated into the set of specifications, and that only corrective Change Requests (CRs) are to be accepted and agreed.

> NOTE 2:  It can be expected that corrective CRs will be introduced into the Release 1999 version 3.x.y specifications throughout 2000.

# 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.

- For this Release 1999 document, references to documents are for Release 1999 versions.

[1]            3G TR 21.905: "Vocabulary for 3GPP Specifications".

[2]            3G TR 21.900: "3GPP Working methods".

# 3      Abbreviations

For the purposes of the present document, the terms and definitions given in TS 21.905 apply.

# 4      General

Release 1999 consists of 3G-only specifications and the GSM Core Network specifications developed for both GSM Release 1999 and Release 1999 of the 3$^{rd}$ Generation mobile system.

The present document identifies the 3G system set of specifications required to implement Release 1999.

> NOTE:     GSM Release 1999 also consists of many enhanced features developed within the 3$^{rd}$ Generation Partnership Project. GSM Specification GSM 01.01 identifies the specifications and Reports of GSM release 1999.

## 4.1     Specification and report numbering

The numbering scheme described is similar to the GSM numbering scheme. The numbering scheme is designed on the experience of GSM in document structure and to create a structure that is easy to understand and remember.

To allow for more flexibility in the 3GPP numbering scheme and to allow for expansion, it has been decided to increase the numbering scheme by one digit to a 2+3 digit system (ab.**c**de). This permits a maximum number of 999 specifications in one series. It should be noted that the GSM system numbering has almost been completely used up.

The numbering scheme applies to specifications and reports for the 3GPP 3rd Generation Mobile System.

Where existing GSM Specifications are enhanced/modified by the TSGs for the 3rd Generation Mobile System the specification title and version should change (title reflecting 3rd Generation Mobile System). The GSM number (ab) is increased by 20 and a "**c**" digit equal to zero added (e.g. GSM 07.07 becomes 3GTS 27.007) indicating the GSM heritage of the Specification.

For newly created 3GPP Specifications the "c" digit is not equal to zero.

Existing 3rd Generation specifications transferred from ETSI SMG have a "c" digit equal to one e.g. SMG UMTS TS 22.00 becomes 3G TS 22.100.

For newly created 3GPP Technical reports the "c" digit is normally equal to nine e.g. A report in the 23 series will have a number 23.9de. The "c" digit equal to eight may be used for over-spill of the ab.9de range, or allocated to reports not intended for external circulation.

Specification numbers will be allocated on request by a centralised point within the 3GPP support group (see subclause 4.1 of TR 21.900 [2]). A particular series will not necessarily remain within or be the sole responsibility of a particular TSG or WG.

The following series titles and descriptions should be used for guidance only and may be further developed with experience.

# 4.2 Specification series

In general the Specification series is identified as follows:

## 4.2.1 21-series

**Requirements specifications**

These specifications are often transient and contain requirements leading to other specifications. They may become obsolete when technical solutions have been fully specified; they could then, e.g., be replaced by reports describing the performance of the system, they could be deleted without replacement or be kept for historical reasons but turned into background material. When found necessary and appropriate, the transient or permanent nature of a requirement specification may be expressed in its scope.

## 4.2.2 22-series

**Service aspects**

Specifications in this series specify services, service features, building blocks or platforms for services (a service feature or service building block may provide certain generic functionality for the composition of a service, including the control by the user; a platform may comprise a single or more network elements, e.g. UIM, mobile terminal, auxiliary system to the core network etc.); stage 1 specifications that are felt appropriate belong to this series; reports defining services which can be realized by generic building blocks etc. also belong to this series.

## 4.2.3 23-series

**Technical realization**

This series mainly contains stage 2 specifications (or specifications of a similar nature describing interworking over several interfaces, the behaviour in unexceptional cases, etc.).

## 4.2.4 24-series

**Signalling protocols (UE - CN network)**

This series contains the detailed and bit-exact stage 3 specifications of protocols between MS/UE and the Core Network.

## 4.2.5      25-series

**UTRA aspects**

### 4.2.5.1      25.100-series

**UTRA radio performance aspects**

This series defines the radio performance of UTRAN.

### 4.2.5.2      25.200-series

**UTRA radio aspects**

This series defines the (physical) layer 1 of UTRA.

### 4.2.5.3      25.300-series

**UTRA radio interface architecture, layer 2 and layer 3 aspects.**

This series defines the layer 2/3 of the UMTS radio.

### 4.2.5.4      25.400-series

**UTRA Network aspects**

This series defines the Iub, Iur and Iu interfaces within UTRAN

## 4.2.6      26-series

**Codecs (speech, video, etc. )**

This series defines speech codecs and other codecs (video etc.).

## 4.2.7      27-series

**Data**

This series defines the functions necessary to support data applications.

## 4.2.8      28-series

Reserved for future use.

## 4.2.9      29-series

**Signalling protocols (NSS )**

This series contains the detailed and bit-exact stage 3 specifications of protocols within the Core Network.

## 4.2.10    30-series

**Programme management**

This series contains the 3GPP 3$^{rd}$ Generation Mobile System, project plans / project work programme and stand-alone documents for major work items.

## 4.2.11    31-series

**UIM**

This series specifies the User Identity Module (UIM) and the interfaces between UIM and other entities.

## 4.2.12    32-series

**Operation and maintenance**

This series defines the application of TMN for the 3GPP 3rd Generation Mobile System and other functions for operation, administration and maintenance of a 3rd Generation Mobile System network.

## 4.2.13    33-series

**Security aspects**

This series contains specifications of security functions.

## 4.2.14    34-series

**Test specifications**

This series contains test specifications.

# 5      Specifications and Reports of 3G Release 1999

Note:      "NSS" in the third column of the table below signifies the Suplementary Services ad hoc group of TSG CN.

| Number | Title | TSG / WG |
|--------|-------|----------|
| 21.101 | 3rd Generation mobile system Release 1999 Specifications | S |
| 21.111 | USIM and IC card requirements | T3 |
| 21.133 | Security Threats and Requirements | S3 |
| 21.900 | 3GPP Working methods | S |
| 21.904 | UE Capability Requirements (UCR) | T2 |
| 21.905 | 3G Vocabulary | S1 |
| 21.910 | Multi-mode UE issues | T2 |
| 21.978 | Feasibility Technical Report – CAMEL Control of VoIP Services | N2A |
| 22.001 | Principles of CircuitTelecommunication Services Supported by a  Public Land Mobile Network (PLMN) | S1 |
| 22.002 | Circuit Bearer Services Supported by a  PLMN | S1 |
| 22.003 | Circuit Teleservices supported by a Public Land Mobile Network (PLMN) | S1 |
| 22.004 | General on Supplementary Services | S1 |
| 22.011 | Service accessibility | S1 |
| 22.016 | International Mobile Equipment Identities (IMEI) | S1 |
| 22.022 | Personalisation of GSM ME Mobile functionality specification - Stage 1 | S3 |
| 22.024 | Description of Charge Advice Information (CAI) | S1 |
| 22.030 | Man-Machine Interface (MMI) of the Mobile Station (MS) | S1 |
| 22.034 | High Speed Circuit Switched Data (HSCSD) - Stage 1 | S1 |
| 22.038 | SIM application toolkit (SAT); Stage 1 | S1 |
| 22.041 | Operator Determined Call Barring | S1 |
| 22.042 | Network Identity and Time Zone (NITZ), stage 1 | S1 |
| 22.043 | Support of Localised Service Area (SoLSA) - Stage 1 | S1 |
| 22.057 | Mobile Station Application Execution Environment (MExE); Stage 1 | S1 |
| 22.060 | General Packet Radio Service (GPRS); Stage 1 | S1 |
| 22.066 | Support of Mobile Number Portability (MNP); Stage 1 | S1 |
| 22.067 | enhanced Multi-Level Precedence and Pre-emption service (eMLPP) - Stage 1 | S1 |
| 22.071 | Location Services (LCS); Stage 1 (T1P1) | S1 |
| 22.072 | Call Deflection (CD); Stage 1 | S1 |
| 22.078 | CAMEL; Stage 1 | S1 |
| 22.079 | Support of Optimal Routing; Stage 1 | S1 |

| 22.081 | Line Identification Supplementary Services; Stage 1 | S1 |
|---|---|---|
| 22.082 | Call Forwarding (CF) Supplementary Services; Stage 1 | S1 |
| 22.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Services; Stage 1 | S1 |
| 22.084 | MultiParty (MPTY) Supplementary Service; Stage 1 | S1 |
| 22.085 | Closed User Group (CUG) Supplementary Services; Stage 1 | S1 |
| 22.086 | Advice of Charge (AoC) Supplementary Services; Stage 1 | S1 |
| 22.087 | User-to-user signalling (UUS); Stage 1 | S1 |
| 22.088 | Call Barring (CB) Supplementary Services; Stage 1 | S1 |
| 22.090 | Unstructured Supplementary Service Data (USSD); Stage 1 | S1 |
| 22.091 | Explicit Call Transfer (ECT) Supplementary Service; Stage 1 | S1 |
| 22.093 | Call Completion to Busy Subscriber (CCBS); Stage 1 | S1 |
| 22.094 | Follow Me Stage 1 | S1 |
| 22.096 | Calling Name Presentation (CNAP); Stage 1 (T1P1) | S1 |
| 22.097 | Multiple Subscriber Profile (MSP); Stage 1 | S1 |
| 22.100 | UMTS Phase 1 | S1 |
| 22.101 | UMTS Service principles | S1 |
| 22.105 | Services & Service capabilities | S1 |
| 22.115 | Service Aspects Charging and billing | S1 |
| 22.121 | Provision of Services in UMTS - The Virtual Home Environment | S1 |
| 22.129 | Handover Requirements between UMTS and GSM or other Radio Systems | S1 |
| 22.135 | Multicall Stage 1 | S1 |
| 22.140 | Multimedia Messaging Service Stage 1 | S1 |
| 22.945 | Study of provision of fax service in GSM and UMTS | T2/SMG03 |
| 22.971 | Automatic establishment of roaming relationships | S1 |
| 22.975 | Advanced addressing | S1 |
| 23.002 | Network Architecture | S2 |
| 23.003 | Numbering, Addressing and Identification | N2B |
| 23.007 | Restoration procedures | N2B |
| 23.008 | Organisation of subscriber data | N2B |
| 23.009 | Handover procedures | N1 |
| 23.011 | Technical Realization of Supplementary Services - General Aspects | NSS |
| 23.012 | Location management procedures | N2B |
| 23.014 | Support of Dual Tone Multi Frequency (DTMF) signalling | N1 |
| 23.015 | Technical realisation of Operator Determined Barring (ODB) | N2B |
| 23.016 | Subscriber data management - Stage 2 | N2B |
| 23.018 | Basic Call Handling - Technical realisation | N2B |
| 23.032 | Universal Geographical Area Description (GAD) | S2 |
| 23.034 | High Speed Circuit Switched Data (HSCSD) - Stage 2 | N1 |
| 23.038 | Alphabets & Language | T2 |
| 23.039 | Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs) | T2 |
| 23.040 | Technical realisation of Short Message Service | T2 |
| 23.041 | Technical Realization of Cell Broadcast Service | T2 |
| 23.042 | Compression algorithm for SMS | T2 |
| 23.046 | Technical realisation of facsimile Group 3 service - non-transparent | |
| 23.054 | Shared Interworking Functions - Stage 2 | N3 |
| 23.057 | Mobile Station Application Execution Environment (MExE) | T2 |
| 23.060 | General Packet Radio Service (GPRS) Service description; Stage 2 | S2 |
| 23.066 | Support of GSM Mobile Number Portability (MNP) stage 2 | N2B |
| 23.067 | Enhanced Multi-Level Precedence and Preemption Service (EMLPP) - Stage 2 | NSS |
| 23.072 | Call Deflection Supplementary Service - Stage 2 | NSS |
| 23.073 | Support of Localised Service Area (SoLSA) - Stage 2 | NSS |
| 23.078 | CAMEL Stage 2 | N2A |
| 23.079 | Support of Optical Routeing - Phase 1 - Stage 2 | N2B |
| 23.081 | Line Identification Supplementary Services - Stage 2 | NSS |
| 23.082 | Call Forwarding (CF) Supplementary Services - Stage 2 | NSS |
| 23.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service - Stage 2 | NSS |
| 23.084 | MultiParty (MPTY) Supplementary Service - Stage 2 | NSS |
| 23.085 | Closed User Group (CUG) Supplementary Service - Stage 2 | NSS |
| 23.086 | Advice of Charge (AoC) Supplementary Service - Stage 2 | NSS |
| 23.087 | User-to-User Signalling (UUS) - Stage 2 | NSS |
| 23.088 | Call Barring (CB) Supplementary Service - Stage 2 | NSS |
| 23.090 | Unstructured Supplementary Service Data (USSD) - Stage 2 | NSS |
| 23.091 | Explicit Call Transfer (ECT) Supplementary Service - Stage 2 | NSS |
| 23.093 | Call Completion to Busy Subscriber (CCBS) - Stage 2 | NSS |
| 23.094 | Follow Me Stage 2 | CN |
| 23.096 | Name Identification Supplementary Service - Stage 2 | NSS |
| 23.097 | Multiple Subscriber Profile (MSP); Stage 2 | NSS |

| 23.101 | General UMTS Architecture | S2 |
|---|---|---|
| 23.107 | Quality of Service, Concept and Architecture | S2 |
| 23.108 | Mobile Radio Interface Layer 3 specification Core Network Protocols stage 2 (structured procedures) | N1 |
| 23.110 | UMTS Access Stratum Services and Functions | S2 |
| 23.116 | Super Charger - Stage 2 | N2B |
| 23.119 | Gateway Location Register (GLR) - Stage2 | N2B |
| 23.121 | Architecture Requirements for release 99 | S2 |
| 23.122 | Non Access Stratum functions related to Mobile Station (MS) in idle mode | N1 |
| 23.127 | Virtual Home Environment / Open Service Architecture | S2 |
| 23.135 | Multicall Stage 2 | N2B |
| 23.140 | Multimedia Messaging Service (MMS) | T2 |
| 23.146 | Technical realisation of facsimile Group 3 service - non-transparent | N3 |
| 23.153 | Out of Band Transcoder Control - Stage 2 | N2B |
| 23.171 | Functional stage 2 description of location services in UMTS | S2 |
| 23.814 | Separating RR and MM specific parts of the MS Classmark | N1 |
| 23.908 | Technical report on Pre-Paging | N2B |
| 23.909 | Technical report on the Gateway Location Register | N2B |
| 23.910 | Circuit Switched Data Bearer Services | N3 |
| 23.911 | Technical report on Out-of-band transcoder control | N2 |
| 23.912 | Technical report on Super-Charger | N2 |
| 23.922 | Architecture for an All IP network | S2 |
| 23.923 | Combined GSM and Mobile IP mobility handling in UMTS IP CN | S2 |
| 23.925 | UMTS Core network based ATM transport | S2 |
| 23.930 | Iu Principles | S2 |
| 23.972 | Circuit Switched Multimedia Telephony | N1 |
| 24.007 | Mobile Radio Interface Signalling Layer 3 - General Aspects | N1 |
| 24.008 | Mobile Radio Interface Layer 3 specification; Core Network Protocols - Stage 3 | N1 |
| 24.010 | Mobile Radio Interface Layer 3 - Supplementary Services Specification - General Aspects | NSS |
| 24.011 | Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface | N1/T2 |
| 24.012 | Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface | N2B/T2 |
| 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 |
| 24.067 | Enhanced Multi-Level Precedence and Pre-emption service (eMLPP) - Stage 3 | NSS |
| 24.072 | Call Deflection Supplementary Service - Stage 3 | NSS |
| 24.080 | Mobile radio Layer 3 Supplementary Service specification - Formats and coding | NSS |
| 24.081 | Line Identification Supplementary Service - Stage 3 | NSS |
| 24.082 | Call Forwarding Supplementary Service - Stage 3 | NSS |
| 24.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service - Stage 3 | NSS |
| 24.084 | MultiParty (MPTY) Supplementary Service - Stage 3 | NSS |
| 24.085 | Closed User Group (CUG) Supplementary Service - Stage 3 | NSS |
| 24.086 | Advice of Charge (AoC) Supplementary Service - Stage 3 | NSS |
| 24.087 | User-to-User Signalling (UUS) - Stage 3 | NSS |
| 24.088 | Call Barring (CB) Supplementary Service - Stage 3 | NSS |
| 24.090 | Unstructured Supplementary Service Data (USSD) - Stage 3 | NSS |
| 24.091 | Explicit Call Transfer (ECT) Supplementary Service - Stage 3 | NSS |
| 24.093 | Call Completion to Busy Subscriber (CCBS) - Stage 3 | NSS |
| 24.096 | Name Identification Supplementary Service - Stage 3 | NSS |
| 24.135 | Multicall Stage 3 | N2B |
| 25.053 | Tandem Free Operation (TFO); Service description; Stage 2 | |
| 25.101 | UE Radio transmission and reception (FDD) | R4 |
| 25.102 | UE Radio transmission and reception (TDD) | R4 |
| 25.104 | UTRA (BS) FDD; Radio transmission and reception | R4 |
| 25.105 | UTRA (BS) TDD: Radio transmission and reception | R4 |
| 25.113 | Base station EMC | R4 |
| 25.123 | Requirements for support of radio resource management (TDD) | R4 |
| 25.133 | Requirements for support of radio resource management (FDD) | R4 |
| 25.141 | Base station conformance testing (FDD) | R4 |
| 25.142 | Base station conformance testing (TDD) | R4 |
| 25.201 | Physical layer -General Description | R1 |
| 25.211 | Physical channels and mapping of transport channels onto physical channels (FDD) | R1 |
| 25.212 | Multiplexing and channel coding (FDD) | R1 |
| 25.213 | Spreading and modulation (FDD) | R1 |
| 25.214 | Physical layer procedures (FDD) | R1 |
| 25.215 | Physical layer; Measurements (FDD) | R1 |
| 25.221 | Physical channels and mapping of transport channels onto physical channels (TDD) | R1 |
| 25.222 | Multiplexing and channel coding (TDD) | R1 |
| 25.223 | Spreading and modulation (TDD) | R1 |
| 25.224 | Pphysical layer procedures (TDD) | R1 |

| 25.225 | Physical layer; Measurements (TDD) | R1 |
|---|---|---|
| 25.301 | Radio Interface Protocol Architecture | R2 |
| 25.302 | Services provided by the physical layer | R2 |
| 25.303 | UE functions and inter-layer procedures in connected mode | R2 |
| 25.304 | UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode | R2 |
| 25.305 | Stage 2 Functional Specification of Location Services in UTRAN (LCS) | R2 |
| 25.321 | Medium Access Control (MAC)  Protocol Specification | R2 |
| 25.322 | Radio Link Control (RLC)  Protocol Specification | R2 |
| 25.323 | Packet Data Convergence Protocol (PDCP) protocol | R2 |
| 25.324 | Radio Interface for Broadcast/Multicast Services | R2 |
| 25.331 | Radio Resource Control (RRC)  Protocol Specification | R2 |
| 25.401 | UTRAN Overall Description | R3 |
| 25.402 | Synchronisation in UTRAN Stage 2 | R3 |
| 25.410 | UTRAN Iu Interface: General Aspects and Principles | R3 |
| 25.411 | UTRAN Iu interface Layer 1 | R3 |
| 25.412 | UTRAN Iu interface signalling transport | R3 |
| 25.413 | UTRAN Iu interface RANAP signalling | R3 |
| 25.414 | UTRAN Iu interface data transport & transport signalling | R3 |
| 25.415 | UTRAN Iu interface user plane protocols | R3 |
| 25.419 | UTRAN Iu interface: Cell broadcast protocols between SMS-CBC and RNC | R3 |
| 25.420 | UTRAN Iur Interface: General Aspects and Principles | R3 |
| 25.421 | UTRAN Iur interface Layer 1 | R3 |
| 25.422 | UTRAN Iur interface signalling transport | R3 |
| 25.423 | UTRAN Iur interface RNSAP signalling | R3 |
| 25.424 | UTRAN Iur interface data transport & transport signalling for CCH data streams | R3 |
| 25.425 | UTRAN Iur interface user plane protocols for CCH data streams | R3 |
| 25.426 | UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams | R3 |
| 25.427 | UTRAN Iur and Iub interface user plane protocols for DCH data streams | R3 |
| 25.430 | UTRAN Iub Interface: General Aspects and Principles | R3 |
| 25.431 | UTRAN Iub interface Layer 1 | R3 |
| 25.432 | UTRAN Iub interface signalling transport | R3 |
| 25.433 | UTRAN Iub interface NBAP signalling | R3 |
| 25.434 | UTRAN Iub interface data transport & transport signalling for CCH data streams | R3 |
| 25.435 | UTRAN Iub interface user plane protocols for CCH data streams | R3 |
| 25.442 | UTRAN Implementation Specific O&M Transport | R3 |
| 25.831 | Study Items for future release | R3 |
| 25.832 | Manifestations of Handover and SRNS relocation | R3 |
| 25.833 | Physical layer items not for inclusion in Release 99 | R1 |
| 25.921 | Guidelines and principles for protocol description and error handling | R2 |
| 25.922 | Radio Resource Management Strategies | R2 |
| 25.924 | Opportunity Driven Multiple Access (ODMA) | R2 |
| 25.925 | Radio Interface for Broadcast/Multicast Services | R2 |
| 25.928 | 1,28Mcps UTRA TDD Physical Layer | R1 |
| 25.931 | UTRAN Functions, examples on signalling procedures | R3 |
| 25.941 | Document structure | R4 |
| 25.942 | RF system scenarios | R4 |
| 25.943 | Deployment aspects | R4 |
| 25.944 | Channel coding and multiplexing examples | R1 |
| 25.990 | Vocabulary for UTRAN | R4 |
| 26.071 | AMR speech Codec; General description | S4 |
| 26.073 | AMR speech Codec; C-source code | S4 |
| 26.074 | AMR speech Codec; Test sequences | S4 |
| 26.090 | AMR speech Codec; Transcoding Functions | S4 |
| 26.091 | AMR speech Codec; Error concealment of lost frames | S4 |
| 26.092 | AMR speech Codec; comfort noise for AMR Speech Traffic Channels | S4 |
| 26.093 | AMR speech Codec; Source Controlled Rate operation | S4 |
| 26.094 | AMR Speech Codec; Voice Activity Detector for AMR Speech Traffic Channels | S4 |
| 26.101 | AMR speech Codec; Frame Structure | S4 |
| 26.102 | AMR speech Codec; Interface to Iu and Uu | S4 |
| 26.103 | Codec lists | S4 |
| 26.104 | AMR speech Codec; Floating point C-Code | S4 |
| 26.110 | Codec for Circuit switched Multimedia Telephony Service; General Description | S4 |
| 26.111 | Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324 | S4 |
| 26.131 | Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Characteristics | S4 |
| 26.132 | Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Test Specification. | S4 |
| 26.911 | Codec for Circuit switched Multimedia Telephony Service;Terminal Implementor's Guide | S4 |
| 26.912 | Codec for Circuit switched Multimedia Telephony Service; Quantitative performance evaluation of H.324 Annex C over 3G | S4 |

| 26.913 | Quantitative performance evaluation of real-time packet switched multimedia services over 3G | S4 |
|--------|---------------------------------------------------------------------------------------------------|------|
| 26.915 | QoS for Speech and Multimedia Codec; Quantitative performance evaluation of real-time packet switched multimedia services over 3G | S4 |
| 26.975 | Performance characterization of the AMR speech codec | S4 |
| 27.001 | General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS) | N3 |
| 27.002 | Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities | N3 |
| 27.003 | Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities | N3 |
| 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 |
| 27.007 | AT command set for 3G User Equipment (UE) | T2 |
| 27.010 | Terminal Equipment to User Equipment (TE-UE) multiplexer protocol  User Equipment (UE) | T2 |
| 27.060 | GPRS Mobile Stations supporting GPRS | N3 |
| 27.103 | Wide Area Network Synchronisation | T2 |
| 27.901 | Report on Terminal Interfaces - An Overview | T2 |
| 27.903 | Discussion of Synchronisation Standards | T2 |
| 29.002 | Mobile Application Part (MAP) | N2B |
| 29.007 | General requirements on Interworking between the PLMN and the ISDN or PSTN | N3 |
| 29.010 | 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) | N2B |
| 29.011 | Signalling Interworking for Supplementary Services | NSS |
| 29.013 | Signalling interworking between ISDN supplementary services Application Service Element (ASE) and Mobile Application Part (MAP) protocols | NSS |
| 29.016 | Serving GPRS Support Mode SGSN - Visitors Location Register (VLR); Gs Interface Network Service Specification | N1 |
| 29.018 | Serving GPRS Support Mode SGSN - Visitors Location Register (VLR); Gs Interface Layer 3 Specification | N1 |
| 29.060 | GPRS Tunnelling protocol (GTP) across the Gn and Gp interface | N2B |
| 29.061 | General Packet Radio Service (GPRS); Interworking between the Public Land Mobile Network (PLMN) supporting GPRS and Packet | N3 |
| 29.078 | CAMEL; Stage 3 | N2A |
| 29.119 | GPRS Tunnelling Protocol (GTP) specification for Gateway Location Register (GLR) | N2B |
| 29.120 | Mobile Application Part (MAP) specification for Gateway Location Register (GLR); stage 3 | N2B |
| 29.198 | Open Services Architecture API part 1 | CN |
| 29.998 | Open Services Architecture API part 2 | CN |
| 30.504 | Work Plan and Study Items - RAN WG4 | R4 |
| 30.531 | Work Plan and Study Items - RAN WG3 | R3 |
| 30.801 | Overall Project  Plan | S2 |
| 30.802 | Project plan on Bearer Services and QoS | S2 |
| 30.804 | Project plan on GSM/UMTS Interoperation and Mobility Management | S2 |
| 30.806 | Project plan on Location based services | S2 |
| 30.808 | Project plan on Packet Architecture and Circuit Architecture | S2 |
| 30.810 | Project plan on Security | S2 |
| 30.812 | Project plan on Services and Service platforms | S2 |
| 31.101 | UICC-terminal interface; Physical and logical characteristics | T3 |
| 31.102 | Characteristics of the USIM Application | T3 |
| 31.110 | Numbering system for telecommunication IC card applications | T3 |
| 31.111 | USIM Application Toolkit (USAT) | T3 |
| 31.120 | Terminal tests for the UICC Interface | T3 |
| 31.121 | UICC Test Specification | T3 |
| 32.005 | GSM call and event data for the Circuit Switched (CS) domain | S5 |
| 32.008 | Subscriber and Equipment trace | S5 |
| 32.015 | GSM Charging Packet Switched (PS) domain | S5 |
| 32.101 | 3G Telecom Management principles and high level requirements | S5 |
| 32.102 | 3G Telecom Management Architecture | S5 |
| 32.104 | 3G Performance Management | S5 |
| 32.105 | 3G Charging call event data | S5 |
| 32.106 | 3G Configuration Management | S5 |
| 32.111 | 3G Fault Management | S5 |
| 33.102 | Security Architecture | S3 |
| 33.103 | Security Integration Guidelines | S3 |
| 33.105 | Cryptographic Algorithm requirements | S3 |
| 33.106 | Lawful interception requirements | S3 |
| 33.107 | Lawful interception architecture and functions | S3 |
| 33.120 | Security Objectives and Principles | S3 |
| 33.900 | Guide to 3G security | S3 |
| 33.901 | Criteria for cryptographic Algorithm design process | S3 |
| 33.902 | Formal Analysis of the 3G Authentication Protocol | S3 |
| 34.108 | Common Test Environments for User Equipment (UE) Conformance Testing | T1 |

| 34.109 | Logical Test Interface (TDD and FDD) | T1 |
| 34.121 | Terminal Conformance Specification, Radio Transmission and Reception (FDD) | T1 |
| 34.122 | Terminal Conformance Specification, Radio Transmission and Reception (TDD) | T1 |
| 34.123-1 | UE Conformance Specification, Part 1 – Conformance specification | T1 |
| 34.123-2 | UE Conformance Specification, Part 2 – ICS | T1 |
| 34.123-3 | UE Conformance Specification, Part 3 – Abstract Test suites | T1 |
| 34.124 | Electro-Magnetic Compatibility (EMC) for Terminal equipment - stage 1 | T1 |
| 34.907 | Report on electrical safety requirements and regulations | T2 |
| 34.910 | Conformance Test specifications – Relevant for Regulatory use | T1 |
| 34.925 | Specific Absorption Rate (SAR) requirements and regulations in different regions | T2 |

# Annex A (informative):
# Model for the technical management and project co-ordination for 3GPP Release 2000

The model is thought as a reference model for structuring the work. It is not the intention to rigorously enforce the usage of the model on all ongoing work, but merely to use it as the common reference model across the TSGs and to structure future work.

TSG SA is through S1 responsible for defining the features and services required in the 3GPP specifications. S1 is responsible of producing the stage 1 descriptions (requirements) for the relevant features and passing them to S2. S1 can also forward their considerations on possible architecture and implementation to S2, but is not responsible for this part of the work.

S2 should then define the architecture for the features and the system, and then divide the features into building blocks based on the architectural decisions made in S2. S2 will then forward the building blocks to the relevant TSGs for the detailed work. These proposals will be reviewed and discussed in an interactive way together with TSGs/WGs, until a common understanding of the required work is reached. During the detailed the work of the TSGs and their working groups, S2 is kept informed about the progress.

The TSGs and their WGs treats the building block as one or several dedicated Work Tasks (WT). Typical output of a given Work Task would be new specification(s), updated specification(s), technical report(s) or the conclusion that the necessary support already is provided in the existing specifications.

S2's role is in corporation with the TSGs and their WGs to identify if synergy can be obtained by using some of the building blocks or extended building blocks for more than one feature. Part of S2's task is to verify that all required work for a full system specification of the features relevant will take place within 3GPP without overlap between groups. In order for S2 to be successful, this has to be done in co-operation with other TSGs/WGs.

The following guidelines are proposed for project scheduling. S1sets a target, S2 performs a first technical review and comments on the target. S2 indicates target for time schedule together with allocation of the defined building blocks. The TSGs and their WGs comment back on these targets. S2 tries if necessary to align the new target between the involved parties. S1 and SA is kept informed on the overall schedule.

It is the task of TSG SA, S1 and S2 to ensure early involvement of S3 to ensure that the potential security requirements, service requirements and the architectural requirements are aligned and communicated to the TSGs and their WGs.

In order for TSG T and its subgroups to plan and perform their horizontal tasks on conformance testing and mobile station capabilities, S2 should invite TSG T to evaluate the potential impact of a new feature. If work on the horizontal task are required this should be included in the overall work plan.
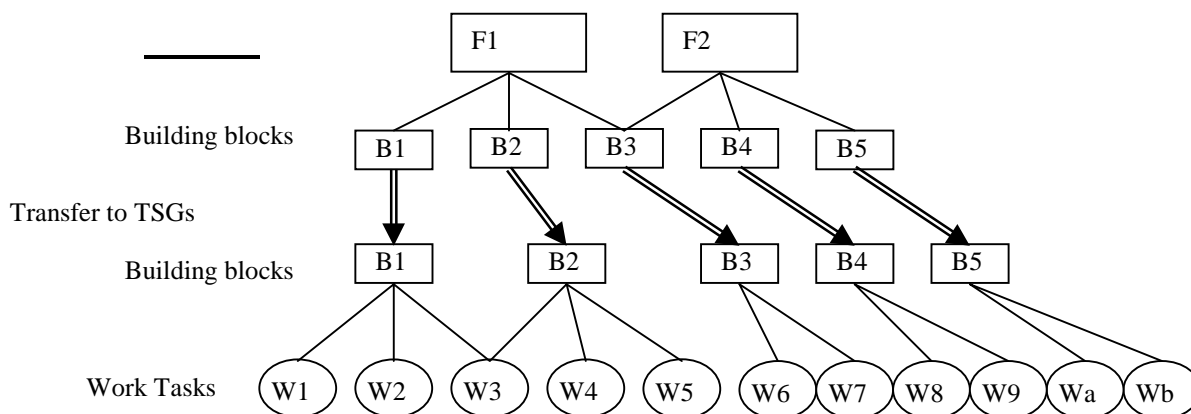
# Annex B (informative):
# Document change history

| Status of GSM 21.101 | | |
|---|---|---|
| **Date** | **Version** | **Information about changes** |
| August 1999 | version 0.0.0 | 1st draft created by MCC |
| August 1999 | version 0.0.1 | Comment from SMG6/S5 and N1 included. New LCS specs |
| September 1999 | version 0.0.2 | Transfer of 04.12 to 24.012 included |
| September 1999 | version 0.0.3 | Joint SMG11/S4 Meeting decisions on AMR and TFO |
| September 1999 | version 0.1.0 | Joint SMG11/S4, S2 (incomplete) and comments included |
| September 1999 | version 0.2.0 | 03.41 transferred T2/SMG4 and S2 new specs and reports |
| October 1999 | version 0.3.0 | Editorial changes and addition of new specifications and reports identified in WGs |
| October 1999 | version 1.0.0 | Reviewed by TSG CN, T and RAN #5 changes implemented and raised to V1.0.0 for information to TSG SA |
| November 1999 | version 1.1.0 | Updated after decisions of TSG SA#5 |
| November 1999 | version 1.2.0 | Updated to align with GSM 01.01 after SMG#30 |
| December 1999 | version | review by SA2 |
| December 1999 | version 2.0.0 | Presented to TSG#6 for approval. Cause 5 considered unstable and should deleted and re-introduced at TSG#5. |
| December 1999 | version 2.1.0 | Clause 5 removed, specs list updated following TSG SA decisions. Presented for e-mail approval. |
| January 2000 | version 2.2.0 | Changes resulting from comments made during e-mail approval. |
| March 2000 | version 2.3.0 | Original clause 5 ("Content of 3G Release 1999") removed.  Original clause 6 renumbered to 5.  List of specifications in new clause 5 brought up to date. Submitted to TSG-SA #7. |
| March 2000 | Version 2.4.0 | Update of list in view of items presented to TSGs N, R and T #7 for approval. |