

ETSI TS 121 102 V4.2.0 (2001-09)

Technical Specification

Universal Mobile Telecommunications System (UMTS); 3rd Generation mobile system Release 4 Specifications (3GPP TS 21.102 version 4.2.0 Release 4)



Reference

RTS/TSGS-0021102Uv4R2

Keywords

UMTS

ETSI

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

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

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

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, send your comment to:

editor@etsi.fr

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2001.
All rights reserved.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/legal/home.htm>).

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

Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under www.etsi.org/key.

Contents

| | |
|--|-----------|
| Intellectual Property Rights | 2 |
| Foreword..... | 2 |
| Foreword..... | 4 |
| 1 Scope | 5 |
| 2 References | 5 |
| 3 Abbreviations | 5 |
| 4 General | 5 |
| 5 Specifications and Reports of 3G Release 4..... | 6 |
| Annex A (informative): Change history | 15 |
| History | 16 |

Foreword

This Technical Specification (TS) 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 3rd generation mobile system specifications for Release 4. The specifications and reports of 3G Release 4 have a major version number 4 (e.g. 4.x.y).

Most of the core Release 4 Technical Specifications and Technical Reports were functionally frozen at the 11th Technical Specification Group meetings (TSG#11) in March 2001.

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 4 version 4.x.y specifications throughout 2001 and beyond.

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: "Vocabulary for 3GPP Specifications".

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

[3] 3GPP TS 21.101: "3rd Generation mobile system Release 1999 Specifications".

3 Abbreviations

For the purposes of the present document, the terms and definitions given in 3GPP TS 21.905 [1] apply.

4 General

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

The present document identifies the 3G system set of specifications required to implement Release 4.

NOTE: The corresponding list of specifications for Release 1999 can be found in 3GPP TS 21.101 [3].

The numbering scheme for specifications is described in 3GPP TR 21.900 [2].

5 Specifications and Reports of 3G Release 4

NOTE 1: The final column of the table below indicates whether or not the documents are intended for adoption by the partner Standards Development Organizations as their own publications. Those marked "no" are internal working documents of the 3GPP TSGs.

NOTE 2: The algorithm specifications in the 35.-series are available only under licence.

NOTE 3: "Type" indicates Technical Specification (TS) or Technical Report (TR).

| Type | Number | Title | WG prime | For publication? |
|------|--------|---|----------|------------------|
| TS | 21.102 | 3rd Generation mobile system Release 4 specifications | SP | Yes |
| TS | 21.111 | USIM and IC card requirements | T3 | Yes |
| TS | 21.133 | Security threats and requirements | S3 | Yes |
| TR | 21.801 | 3GPP drafting rules | SP | No |
| TR | 21.900 | Technical Specification Group working methods | SP | Yes |
| TR | 21.905 | Vocabulary for 3GPP Specifications | S1 | Yes |
| TS | 22.001 | Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN) | S1 | Yes |
| TS | 22.002 | Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN) | S1 | Yes |
| TS | 22.003 | Circuit Teleservices supported by a Public Land Mobile Network (PLMN) | S1 | Yes |
| TS | 22.004 | General on Supplementary Services | S1 | Yes |
| TS | 22.011 | Service accessibility | S1 | Yes |
| TS | 22.016 | International Mobile Equipment Identities (IMEI) | S1 | Yes |
| TS | 22.022 | Personalisation of Mobile Equipment (ME); Mobile functionality specification | S3 | Yes |
| TS | 22.024 | Description of Charge Advice Information (CAI) | S1 | Yes |
| TS | 22.030 | Man-Machine Interface (MMI) of the User Equipment (UE) | S1 | Yes |
| TS | 22.034 | High Speed Circuit Switched Data (HSCSD); Stage 1 | S1 | Yes |
| TS | 22.038 | USIM/SIM Application Toolkit (USAT/SAT); Service description; Stage 1 | S1 | Yes |
| TS | 22.041 | Operator Determined Call Barring | S1 | Yes |
| TS | 22.042 | Network Identity and Time Zone (NITZ), stage 1 | S1 | Yes |
| TS | 22.048 | Security mechanisms for the (Universal) Subscriber Interface Module (U)SIM Application Toolkit; Stage 1 | T3 | Yes |
| TS | 22.053 | Tandem Free Operation (TFO); Service description; Stage 1 | S4 | Yes |
| TS | 22.057 | Mobile Execution Environment (MEExE); Stage 1 | S1 | Yes |
| TS | 22.060 | General Packet Radio Service (GPRS); Stage 1 | S1 | Yes |
| TS | 22.066 | Support of Mobile Number Portability (MNP); Stage 1 | S1 | Yes |
| TS | 22.067 | enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 1 | S1 | Yes |
| TS | 22.071 | Location Services (LCS); Stage 1 | S1 | Yes |
| TS | 22.072 | Call Deflection (CD); Stage 1 | S1 | Yes |
| TS | 22.076 | Noise suppression for the AMR codec; Service description; Stage 1 | S4 | Yes |
| TS | 22.078 | CAMEL; Stage 1 | S1 | Yes |
| TS | 22.079 | Support of optimal routing; Stage 1 | S1 | Yes |
| TS | 22.081 | Line Identification supplementary services; Stage 1 | S1 | Yes |
| TS | 22.082 | Call Forwarding (CF) Supplementary Services; Stage 1 | S1 | Yes |
| TS | 22.083 | Call Waiting (CW) and Call Hold (HOLD) supplementary services; Stage 1 | S1 | Yes |
| TS | 22.084 | MultiParty (MPTY) supplementary service; Stage 1 | S1 | Yes |
| TS | 22.085 | Closed User Group (CUG) supplementary services; Stage 1 | S1 | Yes |
| TS | 22.086 | Advice of Charge (AoC) supplementary services; Stage 1 | S1 | Yes |
| TS | 22.087 | User-to-user signalling (UUS); Stage 1 | S1 | Yes |
| TS | 22.088 | Call Barring (CB) supplementary services; Stage 1 | S1 | Yes |
| TS | 22.090 | Unstructured Supplementary Service Data (USSD); Stage 1 | S1 | Yes |
| TS | 22.091 | Explicit Call Transfer (ECT) supplementary service; Stage 1 | S1 | Yes |
| TS | 22.093 | Completion of Calls to Busy Subscriber (CCBS); Service description, Stage 1 | S1 | Yes |
| TS | 22.094 | Follow Me service description - Stage 1 | S1 | Yes |
| TS | 22.096 | Name identification supplementary services; Stage 1 | S1 | Yes |
| TS | 22.097 | Multiple Subscriber Profile (MSP) Phase 1; Service description - Stage 1 | S1 | Yes |
| TS | 22.101 | Service aspects; Service principles | S1 | Yes |
| TS | 22.105 | Services & service capabilities | S1 | Yes |
| TS | 22.112 | USIM toolkit interpreter; Stage 1 | T3 | Yes |

| | | | | |
|----|--------|--|----|-----|
| TS | 22.115 | Service Aspects Charging and billing | S1 | Yes |
| TS | 22.121 | Service aspects; The Virtual Home Environment; Stage 1 | S1 | Yes |
| TS | 22.127 | Service Requirement for the Open Services Access (OSA); Stage 1 | S1 | Yes |
| TS | 22.129 | Handover Requirements between UMTS and GSM or other Radio Systems | S1 | Yes |
| TS | 22.135 | Multicall; Service description; Stage 1 | S1 | Yes |
| TS | 22.140 | Service aspects; Stage 1; Multimedia Messaging Service | S1 | Yes |
| TR | 22.976 | Study on PS domain services and capabilities | S1 | Yes |
| TS | 23.002 | Network Architecture | S2 | Yes |
| TS | 23.003 | Numbering, Addressing and Identification | N4 | Yes |
| TS | 23.007 | Restoration procedures | N4 | Yes |
| TS | 23.008 | Organisation of subscriber data | N4 | Yes |
| TS | 23.009 | Handover procedures | N1 | Yes |
| TS | 23.011 | Technical realization of Supplementary Services | N4 | Yes |
| TS | 23.012 | Location management procedures | N4 | Yes |
| TS | 23.014 | Support of Dual Tone Multi Frequency (DTMF) signalling | N1 | Yes |
| TS | 23.015 | Technical realisation of Operator Determined Barring (ODB) | N4 | Yes |
| TS | 23.016 | Subscriber data management; Stage 2 | N4 | Yes |
| TS | 23.018 | Basic Call Handling; Technical realization | N4 | Yes |
| TS | 23.032 | Universal Geographical Area Description (GAD) | S2 | Yes |
| TS | 23.034 | High Speed Circuit Switched Data (HSCSD); Stage 2 | N1 | Yes |
| TS | 23.038 | Alphabets and language-specific information | T2 | Yes |
| TR | 23.039 | Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs) | T2 | Yes |
| TS | 23.040 | Technical realization of Short Message Service (SMS) | T2 | Yes |
| TS | 23.041 | Technical realization of Cell Broadcast Service (CBS) | T2 | Yes |
| TS | 23.042 | Compression algorithm for SMS | T2 | Yes |
| TS | 23.048 | Security Mechanisms for SIM Toolkit Application; Stage 2 | T3 | Yes |
| TS | 23.053 | Tandem Free Operation (TFO); Service description; Stage 2 | S4 | Yes |
| TS | 23.057 | Mobile Execution Environment (MExE); Functional description; Stage 2 | T2 | Yes |
| TS | 23.060 | General Packet Radio Service (GPRS) Service description; Stage 2 | S2 | Yes |
| TS | 23.066 | Support of GSM Mobile Number Portability (MNP) stage 2 | N4 | Yes |
| TS | 23.067 | Enhanced Multi-Level Precedence and Preemption Service (EMLPP); Stage 2 | N4 | Yes |
| TS | 23.072 | Call Deflection Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.073 | Support of Localised Service Area (SoLSA); Stage 2 | N4 | Yes |
| TS | 23.078 | Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2 | N2 | Yes |
| TS | 23.079 | Support of Optimal Routeing (SOR); Technical realization; Stage 2 | N4 | Yes |
| TS | 23.081 | Line Identification supplementary services; Stage 2 | N4 | Yes |
| TS | 23.082 | Call Forwarding (CF) Supplementary Services; Stage 2 | N4 | Yes |
| TS | 23.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.084 | MultiParty (MPTY) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.085 | Closed User Group (CUG) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.086 | Advice of Charge (AoC) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.087 | User-to-User Signalling (UUS) supplementary service; Stage 2 | N4 | Yes |
| TS | 23.088 | Call Barring (CB) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.090 | Unstructured Supplementary Service Data (USSD); Stage 2 | N4 | Yes |
| TS | 23.091 | Explicit Call Transfer (ECT) Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.093 | Technical realization of Completion of Calls to Busy Subscriber (CCBS); Stage 2 | N4 | Yes |
| TS | 23.094 | Follow Me Stage 2 | N4 | Yes |
| TS | 23.096 | Name Identification Supplementary Service; Stage 2 | N4 | Yes |
| TS | 23.097 | Multiple Subscriber Profile (MSP) Phase 1; Stage 2 | N4 | Yes |
| TS | 23.101 | General UMTS Architecture | S2 | Yes |
| TS | 23.107 | Quality of Service (QoS) concept and architecture | S2 | Yes |
| TS | 23.108 | Mobile Radio Interface Layer 3 specification Core Network Protocols stage 2 (structured procedures) | N1 | Yes |
| TS | 23.110 | UMTS Access Stratum Services and Functions | S2 | Yes |
| TS | 23.116 | Super-Charger technical realization; Stage 2 | N4 | Yes |
| TS | 23.119 | Gateway Location Register (GLR); Stage2 | N4 | Yes |
| TS | 23.122 | Non-Access-Stratum functions related to Mobile Station (MS) in idle mode | N1 | Yes |
| TS | 23.127 | Virtual Home Environment; Stage 2 | S2 | Yes |
| TS | 23.135 | Multicall supplementary service; Stage 2 | N4 | Yes |
| TS | 23.140 | Multimedia Messaging Service (MMS); Functional description; Stage 2 | T2 | Yes |
| TS | 23.146 | Technical realisation of facsimile Group 3 service - non-transparent | N3 | Yes |

| | | | | |
|----|--------|---|----|-----|
| TS | 23.153 | Out of Band Transcoder Control; Stage 2 | N4 | Yes |
| TS | 23.205 | Bearer-independent circuit-switched core network; Stage 2 | N4 | Yes |
| TS | 23.221 | Architectural requirements | S2 | Yes |
| TS | 23.227 | Application and user interaction in the UE; Principles and specific requirements | T2 | Yes |
| TS | 23.271 | Functional stage 2 description of location services | S2 | Yes |
| TR | 23.821 | Architecture Principles for Release 2000 | S2 | No |
| TR | 23.873 | Feasibility study for transport and control separation in the PS CN domain | S2 | No |
| TR | 23.874 | Feasibility study of architecture for network requested PDP context activation with User-ID | S2 | No |
| TR | 23.907 | Quality of Service concept | S1 | Yes |
| TR | 23.908 | Technical report on Pre-Paging | N4 | Yes |
| TR | 23.909 | Technical report on the Gateway Location Register | N4 | Yes |
| TR | 23.910 | Circuit switched data bearer services | N3 | Yes |
| TR | 23.911 | Technical report on Out-of-band transcoder control | N4 | Yes |
| TR | 23.912 | Technical report on Super-Charger | N4 | Yes |
| TR | 23.925 | UMTS Core network based ATM transport | S2 | Yes |
| TR | 23.930 | Iu Principles | S2 | Yes |
| TS | 24.002 | GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration | N1 | Yes |
| TS | 24.007 | Mobile Radio Interface Signalling Layer 3 - General Aspects | N1 | Yes |
| TS | 24.008 | Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3 | N1 | Yes |
| TS | 24.010 | Mobile Radio Interface Layer 3 - Supplementary Services Specification - General Aspects | N4 | Yes |
| TS | 24.011 | Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface | N1 | Yes |
| TS | 24.022 | Radio Link Protocol (RLP) for circuit switched bearer and teleservices | N3 | Yes |
| TS | 24.030 | Location Services LCS Stage 3 SS (MO-LR) | N4 | Yes |
| TS | 24.067 | Enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 3 | N4 | Yes |
| TS | 24.072 | Call Deflection Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.080 | Mobile radio Layer 3 Supplementary Service specification - Formats and coding | N4 | Yes |
| TS | 24.081 | Line Identification Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.082 | Call Forwarding Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.084 | MultiParty (MPTY) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.085 | Closed User Group (CUG) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.086 | Advice of Charge (AoC) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.087 | User-to-User Signalling (UUS); Stage 3 | N4 | Yes |
| TS | 24.088 | Call Barring (CB) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.090 | Unstructured Supplementary Service Data (USSD); Stage 3 | N4 | Yes |
| TS | 24.091 | Explicit Call Transfer (ECT) Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.093 | Call Completion to Busy Subscriber (CCBS); Stage 3 | N4 | Yes |
| TS | 24.096 | Name Identification Supplementary Service; Stage 3 | N4 | Yes |
| TS | 24.135 | Multicall supplementary service; Stage 3 | N4 | Yes |
| TS | 25.101 | UE Radio transmission and reception (FDD) | R4 | Yes |
| TS | 25.102 | UE Radio transmission and reception (TDD) | R4 | Yes |
| TS | 25.104 | UTRA (BS) FDD; Radio transmission and reception | R4 | Yes |
| TS | 25.105 | UTRA (BS) TDD; Radio transmission and reception | R4 | Yes |
| TS | 25.106 | UTRA Repeater; Radio transmission and reception | R4 | Yes |
| TS | 25.113 | Base station EMC | R4 | Yes |
| TS | 25.123 | Requirements for support of radio resource management (TDD) | R4 | Yes |
| TS | 25.133 | Requirements for support of radio resource management (FDD) | R4 | Yes |
| TS | 25.141 | Base station conformance testing (FDD) | R4 | Yes |
| TS | 25.142 | Base station conformance testing (TDD) | R4 | Yes |
| TS | 25.143 | UTRA Repeater; Conformance testing | R4 | Yes |
| TS | 25.201 | Physical layer -General Description | R1 | Yes |
| TS | 25.211 | Physical channels and mapping of transport channels onto physical channels (FDD) | R1 | Yes |
| TS | 25.212 | Multiplexing and channel coding (FDD) | R1 | Yes |
| TS | 25.213 | Spreading and modulation (FDD) | R1 | Yes |
| TS | 25.214 | Physical layer procedures (FDD) | R1 | Yes |
| TS | 25.215 | Physical layer; Measurements (FDD) | R1 | Yes |
| TS | 25.221 | Physical channels and mapping of transport channels onto physical channels (TDD) | R1 | Yes |

| | | | | |
|----|--------|--|----|-----|
| TS | 25.222 | Multiplexing and channel coding (TDD) | R1 | Yes |
| TS | 25.223 | Spreading and modulation (TDD) | R1 | Yes |
| TS | 25.224 | Physical layer procedures (TDD) | R1 | Yes |
| TS | 25.225 | Physical layer; Measurements (TDD) | R1 | Yes |
| TS | 25.301 | Radio Interface Protocol Architecture | R2 | Yes |
| TS | 25.302 | Services provided by the physical layer | R2 | Yes |
| TS | 25.303 | Interlayer procedures in Connected Mode | R2 | Yes |
| TS | 25.304 | UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode | R2 | Yes |
| TS | 25.305 | Stage 2 functional specification of UE positioning in UTRAN | R2 | Yes |
| TS | 25.306 | UE Radio Access capabilities definition | R2 | Yes |
| TS | 25.307 | Requirements on UE supporting a release-independent frequency band | R2 | Yes |
| TS | 25.321 | Medium Access Control (MAC) protocol specification | R2 | Yes |
| TS | 25.322 | Radio Link Control (RLC) protocol specification | R2 | Yes |
| TS | 25.323 | Packet Data Convergence Protocol (PDCP) specification | R2 | Yes |
| TS | 25.324 | Broadcast/Multicast Control (BMC) | R2 | Yes |
| TS | 25.331 | Radio Resource Control (RRC) Protocol Specification | R2 | Yes |
| TS | 25.401 | UTRAN Overall Description | R3 | Yes |
| TS | 25.402 | Synchronisation in UTRAN Stage 2 | R3 | Yes |
| TS | 25.410 | UTRAN Iu Interface: General Aspects and Principles | R3 | Yes |
| TS | 25.411 | UTRAN Iu interface Layer 1 | R3 | Yes |
| TS | 25.412 | UTRAN Iu interface signalling transport | R3 | Yes |
| TS | 25.413 | UTRAN Iu interface RANAP signalling | R3 | Yes |
| TS | 25.414 | UTRAN Iu interface data transport & transport signalling | R3 | Yes |
| TS | 25.415 | UTRAN Iu interface user plane protocols | R3 | Yes |
| TS | 25.419 | UTRAN Iu-BC interface: Service Area Broadcast Protocol (SABP) | R3 | Yes |
| TS | 25.420 | UTRAN Iur Interface: General Aspects and Principles | R3 | Yes |
| TS | 25.421 | UTRAN Iur interface Layer 1 | R3 | Yes |
| TS | 25.422 | UTRAN Iur interface signalling transport | R3 | Yes |
| TS | 25.423 | UTRAN Iur interface RNSAP signalling | R3 | Yes |
| TS | 25.424 | UTRAN Iur interface data transport & transport signalling for CCH data streams | R3 | Yes |
| TS | 25.425 | UTRAN Iur interface user plane protocols for CCH data streams | R3 | Yes |
| TS | 25.426 | UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams | R3 | Yes |
| TS | 25.427 | UTRAN Iur and Iub interface user plane protocols for DCH data streams | R3 | Yes |
| TS | 25.430 | UTRAN Iub Interface: General Aspects and Principles | R3 | Yes |
| TS | 25.431 | UTRAN Iub interface Layer 1 | R3 | Yes |
| TS | 25.432 | UTRAN Iub interface signalling transport | R3 | Yes |
| TS | 25.433 | UTRAN Iub interface NBAP signalling | R3 | Yes |
| TS | 25.434 | UTRAN Iub interface data transport & transport signalling for CCH data streams | R3 | Yes |
| TS | 25.435 | UTRAN Iub interface user plane protocols for CCH data streams | R3 | Yes |
| TS | 25.442 | UTRAN Implementation Specific O&M Transport | R3 | Yes |
| TR | 25.832 | Manifestations of Handover and SRNS relocation | R3 | No |
| TR | 25.834 | UTRA TDD low chip rate option; Radio protocol aspects | R2 | No |
| TR | 25.835 | Report on hybrid ARQ type II/III | R2 | No |
| TR | 25.836 | Node B synchronization for TDD | R1 | No |
| TR | 25.837 | Hybrid ARQ Type II/III (Iub/Iur aspects) | R3 | No |
| TR | 25.838 | Node B Synchronisation for TDD (Iub/Iur aspects) | R3 | No |
| TR | 25.839 | Uplink Synchronous Transmission Scheme (USTS) (Iur/Iub aspects) | R3 | No |
| TR | 25.840 | Terminal power saving features | R1 | No |
| TR | 25.841 | DSCH power control improvement in soft handover | R1 | No |
| TR | 25.842 | Smart antenna | R1 | No |
| TR | 25.843 | 1,28 Mcps TDD UE Radio Access Capabilities | R2 | No |
| TR | 25.844 | Radio access bearer support enhancements | R2 | No |
| TR | 25.845 | FDD RACH and AICH performance requirements | R4 | No |
| TR | 25.847 | UE positioning enhancements | R2 | No |
| TR | 25.848 | Physical Layer Aspects of UTRA High Speed Downlink Packet Access | R1 | No |
| TR | 25.849 | DSCH power control improvement in soft handover | R3 | No |
| TR | 25.850 | UE positioning in UTRAN Iub/Iur protocol aspects | R3 | No |
| TR | 25.851 | RAB Quality of Service Renegotiation over Iu | R3 | No |
| TR | 25.852 | Radio access bearer support enhancements for the Iu | R3 | No |
| TR | 25.853 | Delay budget within the access stratum | R3 | No |

| | | | | |
|----|--------|--|----|-----|
| TR | 25.921 | Guidelines and principles for protocol description and error handling | R2 | Yes |
| TR | 25.922 | Radio Resource Management Strategies | R2 | Yes |
| TR | 25.924 | Opportunity Driven Multiple Access (ODMA) | R2 | Yes |
| TR | 25.928 | 1,28 Mcps functionality for UTRA TDD physical layer | R1 | Yes |
| TR | 25.931 | UTRAN Functions, examples on signalling procedures | R3 | Yes |
| TR | 25.933 | IP Transport in UTRAN | R3 | Yes |
| TR | 25.934 | AAL2 QoS optimization | R3 | Yes |
| TR | 25.935 | RRM optimisation | R3 | Yes |
| TR | 25.936 | Handover for realtime services from PS-domain | R3 | Yes |
| TR | 25.937 | UTRAN TDD low chiprate | R3 | Yes |
| TR | 25.938 | Terminal power saving features | R3 | Yes |
| TR | 25.942 | RF system scenarios | R4 | Yes |
| TR | 25.943 | Deployment aspects | R4 | Yes |
| TR | 25.944 | Channel coding and multiplexing examples | R1 | Yes |
| TR | 25.945 | RF requirements for low chip rate TDD option | R4 | Yes |
| TR | 25.946 | RAB Quality of Service Negotiation over Iu | R3 | Yes |
| TR | 25.950 | UTRA high speed downlink packet access | R2 | Yes |
| TR | 25.951 | Base Station classification (FDD) | R4 | Yes |
| TR | 25.953 | TrFO/TFO | R3 | Yes |
| TR | 25.954 | Migration to modification procedure | R3 | Yes |
| TR | 25.956 | UTRA repeater: Planning guidelines and system analysis | R4 | Yes |
| TS | 26.071 | AMR speech Codec; General description | S4 | Yes |
| TS | 26.073 | AMR speech Codec; C-source code | S4 | Yes |
| TS | 26.074 | AMR speech Codec; Test sequences | S4 | Yes |
| TS | 26.077 | Minimum Performance Requirements for Noise Suppressor Application to the AMR Speech Encoder | S4 | Yes |
| TS | 26.090 | AMR speech Codec; Transcoding Functions | S4 | Yes |
| TS | 26.091 | AMR speech Codec; Error concealment of lost frames | S4 | Yes |
| TS | 26.092 | AMR speech Codec; comfort noise for AMR Speech Traffic Channels | S4 | Yes |
| TS | 26.093 | AMR speech Codec; Source Controlled Rate operation | S4 | Yes |
| TS | 26.094 | AMR Speech Codec; Voice Activity Detector for AMR Speech Traffic Channels | S4 | Yes |
| TS | 26.101 | AMR speech Codec; Frame Structure | S4 | Yes |
| TS | 26.102 | AMR speech Codec; Interface to Iu and Uu | S4 | Yes |
| TS | 26.103 | Codec lists | S4 | Yes |
| TS | 26.104 | ANSI?C code for the floating-point AMR speech codec | S4 | Yes |
| TS | 26.110 | Codec for circuit switched multimedia telephony service; General description | S4 | Yes |
| TS | 26.111 | Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324 | S4 | Yes |
| TS | 26.115 | Transmission Delay and Echo Control Planning For Speech and Multi-Media Services | S4 | Yes |
| TS | 26.131 | Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Characteristics | S4 | Yes |
| TS | 26.132 | Narrow Band (3,1kHz) Speech & Video Telephony Terminal Acoustic Test Specification. | S4 | Yes |
| TS | 26.233 | End-to-end transparent streaming service; General description | S4 | Yes |
| TS | 26.234 | End-to-end transparent streaming service; Protocols and codecs | S4 | Yes |
| TR | 26.901 | AMR wideband speech codec; Feasibility study report | S4 | Yes |
| TR | 26.911 | Codec for Circuit switched Multimedia Telephony Service; Terminal Implementor's Guide | S4 | Yes |
| TR | 26.912 | Codec for Circuit switched Multimedia Telephony Service; Quantitative performance evaluation of H.324 Annex C over 3G | S4 | Yes |
| TR | 26.975 | Performance characterization of the AMR speech codec | S4 | Yes |
| TR | 26.978 | Results of the AMR noise suppression selection phase | S4 | Yes |
| TS | 27.001 | General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS) | N3 | Yes |
| TS | 27.002 | Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities | N3 | Yes |
| TS | 27.003 | Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities | N3 | Yes |
| TS | 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 |
| TS | 27.007 | AT command set for 3G User Equipment (UE) | T2 | Yes |
| TS | 27.010 | Terminal Equipment to User Equipment (TE-UE) multiplexer protocol User Equipment (UE) | T2 | Yes |
| TS | 27.060 | Packet domain; Mobile Station (MS) supporting Packet Switched services | N3 | Yes |

| | | | | |
|----|-------------|--|----|-----|
| TS | 27.103 | Wide Area Network Synchronization | T2 | Yes |
| TR | 27.901 | Report on Terminal Interfaces - An Overview | T2 | Yes |
| TR | 27.903 | Discussion of synchronization standards | T2 | Yes |
| TS | 28.020 | Rate Adaptation on the Base Station System - Mobile Service Switching Centre (BSS-MSC) Interface | N3 | Yes |
| TS | 28.062 | Inband Tandem Free Operation (TFO) of speech codecs; Service description; Stage 3 | S4 | Yes |
| TS | 29.002 | Mobile Application Part (MAP) specification | N4 | Yes |
| TS | 29.007 | General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN) | N3 | Yes |
| TS | 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) | N4 | Yes |
| TS | 29.011 | Signalling Interworking for Supplementary Services | N4 | Yes |
| TS | 29.013 | Signalling interworking between ISDN supplementary services Application Service Element (ASE) and Mobile Application Part (MAP) protocols | N4 | Yes |
| TS | 29.016 | Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Network Service Specification | N1 | Yes |
| TS | 29.018 | Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Layer 3 Specification | N1 | Yes |
| TS | 29.060 | GPRS Tunnelling protocol (GTP) across the Gn and Gp interface | N4 | Yes |
| TS | 29.061 | Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based services and Packet Data Networks (PDN) | N3 | Yes |
| TS | 29.078 | Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification | N2 | Yes |
| TS | 29.108 | Application of the Radio Access Network Application Part (RANAP) on the E-interface | R3 | Yes |
| TS | 29.119 | GPRS Tunnelling Protocol (GTP) specification for Gateway Location Register (GLR) | N4 | Yes |
| TS | 29.120 | Mobile Application Part (MAP) specification for Gateway Location Register (GLR); Stage 3 | N4 | Yes |
| TS | 29.198-01 | Open Service Access (OSA) Application Programming Interface (API); Part 1: Overview | N5 | Yes |
| TS | 29.198-02 | Open Service Access (OSA) Application Programming Interface (API); Part 2: Common data | N5 | Yes |
| TS | 29.198-03 | Open Service Access (OSA) Application Programming Interface (API); Part 3: Framework | N5 | Yes |
| TS | 29.198-04 | Open Service Access (OSA) Application Programming Interface (API); Part 4: Call control | N5 | Yes |
| TS | 29.198-05 | Open Service Access (OSA) Application Programming Interface (API); Part 5: Generic user interaction | N5 | Yes |
| TS | 29.198-06 | Open Service Access (OSA) Application Programming Interface (API); Part 6: Mobility | N5 | Yes |
| TS | 29.198-07 | Open Service Access (OSA) Application Programming Interface (API); Part 7: Terminal capabilities | N5 | Yes |
| TS | 29.198-08 | Open Service Access (OSA) Application Programming Interface (API); Part 8: Data session control | N5 | Yes |
| TS | 29.198-11 | Open Service Access (OSA) Application Programming Interface (API); Part 11: Account management | N5 | Yes |
| TS | 29.198-12 | Open Service Access (OSA) Application Programming Interface (API); Part 12: Charging | N5 | Yes |
| TS | 29.202 | Signalling System No. 7 (SS7) signalling transport in core network; Stage 3 | N4 | Yes |
| TS | 29.205 | Application of Q.1900 series to bearer-independent circuit-switched core network architecture; Stage 3 | N4 | Yes |
| TS | 29.232 | Media Gateway Controller (MGC) - Media Gateway (MGW) interface; Stage 3 | N4 | Yes |
| TS | 29.414 | Core network Nb data transport and transport signalling | N3 | Yes |
| TS | 29.415 | Core network Nb interface user plane protocols | N3 | Yes |
| TR | 29.998-01 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 1: General Issues on API Mapping | N5 | Yes |
| TR | 29.998-04-1 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 4: Call Control Service Mapping; Subpart 1: API to CAP Mapping | N5 | Yes |
| TR | 29.998-05-1 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 5: User Interaction Service Mapping; Subpart 1: API to CAP Mapping | N5 | Yes |

| | | | | |
|----|-------------|--|----|-----|
| TR | 29.998-05-4 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 5: User Interaction Service Mapping; Subpart 4: API to SMS Mapping | N5 | Yes |
| TR | 29.998-06 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 6: User Location – User Status Service Mapping to MAP | N5 | Yes |
| TR | 29.998-08 | Open Service Access (OSA) Application Programming Interface (API) Mapping for Open Service Access; Part 8: Data Session Control Service Mapping to CAP | N5 | Yes |
| TR | 30.504 | Work Plan and Study Items - RAN WG4 | R4 | No |
| TS | 31.101 | UICC-terminal interface; Physical and logical characteristics | T3 | Yes |
| TS | 31.102 | Characteristics of the USIM Application | T3 | Yes |
| TS | 31.110 | Numbering system for telecommunication IC card applications | T3 | Yes |
| TS | 31.111 | USIM Application Toolkit (USAT) | T3 | Yes |
| TS | 31.112 | USAT Interpreter Architecture Description; Stage 2 | TP | Yes |
| TS | 31.113 | USAT interpreter byte codes | TP | Yes |
| TS | 31.121 | UICC-terminal interface; USIM application test specification | T3 | Yes |
| TS | 31.122 | USIM conformance test specification | T3 | Yes |
| TS | 32.101 | 3G Telecom Management principles and high level requirements | S5 | Yes |
| TS | 32.102 | 3G Telecom Management Architecture | S5 | Yes |
| TS | 32.111-1 | Telecommunication Management; Fault Management; Part 1: 3G fault management requirements | S5 | Yes |
| TS | 32.111-2 | Telecommunication Management; Fault Management; Part 2: Alarm Integration Reference Point: Information Service | S5 | Yes |
| TS | 32.111-3 | Telecommunication Management; Fault Management; Part 3: Alarm Integration Reference Point: CORBA solution set version 1:1 | S5 | Yes |
| TS | 32.111-4 | Telecommunication Management; Fault Management; Part 4: Alarm Integration Reference Point: CMIP solution set | S5 | Yes |
| TS | 32.200 | Telecommunication management; Charging management; Charging principles | S5 | Yes |
| TS | 32.205 | Telecommunication management; Charging management; 3G charging data description for the CS domain | S5 | Yes |
| TS | 32.215 | 3G Telecom Management; Charging management; Charging data description for the Packet Switched (PS) domain | S5 | Yes |
| TS | 32.235 | Telecommunication management; Charging management; Charging data description for application services | S5 | Yes |
| TS | 32.300 | Telecommunication Management; Configuration Management; Name convention for Managed Objects | S5 | Yes |
| TS | 32.301 | Telecommunication Management; Configuration Management; Notification IRP: requirements | S5 | Yes |
| TS | 32.302 | Telecommunication Management; Configuration Management; Notification Integration Reference Point; Information Service version 1 | S5 | Yes |
| TS | 32.303 | Telecommunication Management; Configuration Management; Notification Integration Reference Point; CORBA solution set version 1:1 | S5 | Yes |
| TS | 32.304 | Telecommunication Management; Configuration Management; Notification Integration Reference Point: CMIP Solution Set Version 1:1 | S5 | Yes |
| TS | 32.311 | Telecommunication management; Generic IRP management; Requirements | S5 | Yes |
| TS | 32.312 | Telecommunication management; Generic IRP management; Information service | S5 | Yes |
| TS | 32.401 | Telecommunication management; Performance Management (PM); Concept and requirements | S5 | Yes |
| TS | 32.403 | Telecommunication management; Performance Management (PM); Performance measurements - UMTS and combined UMTS/GSM | S5 | Yes |
| TS | 32.600 | Telecommunication Management; Configuration Management; 3G configuration management; Concept and main requirements | S5 | Yes |
| TS | 32.601 | Telecommunication Management; Configuration Management; Basic CM IRP: requirements | S5 | Yes |
| TS | 32.602 | Telecommunication Management; Configuration Management; Basic configuration management IRP information model | S5 | Yes |
| TS | 32.603 | Telecommunication Management; Configuration Management; Basic configuration management IRP: CORBA solution set | S5 | Yes |
| TS | 32.604 | Telecommunication Management; Configuration Management; Basic configuration management IRP CMIP solution set | S5 | Yes |
| TS | 32.611 | Telecommunication management; Configuration management; 3G configuration management: Bulk CM IRP requirements | S5 | Yes |
| TS | 32.612 | Telecommunication management; Configuration management; 3G configuration management: Bulk configuration management IRP: Information | S5 | Yes |

| | | | | |
|----|----------|--|----|-----|
| | | service | | |
| TS | 32.613 | Telecommunication management; Configuration management; 3G configuration management: Bulk configuration management IRP: CORBA solution set | S5 | Yes |
| TS | 32.614 | Telecommunication management; Configuration management; 3G configuration management: Bulk configuration management IRP: CMIP solution set | S5 | Yes |
| TS | 32.615 | Telecommunication management; Configuration management; 3G configuration management: Bulk configuration management IRP: XML file format definition | S5 | Yes |
| TS | 32.621 | Telecommunication Management; Configuration Management; Generic network resources IRP: requirements | S5 | Yes |
| TS | 32.622 | Telecommunication Management; Configuration Management; Generic network resources IRP: NRM | S5 | Yes |
| TS | 32.623 | Telecommunication Management; Configuration Management; Generic network resources IRP: CORBA solution set | S5 | Yes |
| TS | 32.624 | Telecommunication Management; Configuration Management; Generic network resources: IRP CMIP solution set | S5 | Yes |
| TS | 32.631 | Telecommunication Management; Configuration Management; Core network resources IRP: requirements | S5 | Yes |
| TS | 32.632 | Telecommunication Management; Configuration Management; Core Network Resources IRP: NRM | S5 | Yes |
| TS | 32.633 | Telecommunication Management; Configuration Management; Core network resources IRP: CORBA solution set | S5 | Yes |
| TS | 32.634 | Telecommunication Management; Configuration Management; Core network resources IRP: CMIP solution set | S5 | Yes |
| TS | 32.641 | Telecommunication Management; Configuration Management; UTRAN network resources IRP: requirements | S5 | Yes |
| TS | 32.642 | Telecommunication Management; Configuration Management; UTRAN network resources IRP: NRM | S5 | Yes |
| TS | 32.643 | Telecommunication Management; Configuration Management; UTRAN network resources IRP: CORBA solution set | S5 | Yes |
| TS | 32.644 | Telecommunication Management; Configuration Management; UTRAN network resources IRP: CMIP solution set | S5 | Yes |
| TR | 32.800 | Management level procedures and interaction with UTRAN | S5 | Yes |
| TS | 33.102 | 3G security; Security architecture | S3 | Yes |
| TS | 33.103 | Security Integration Guidelines | S3 | Yes |
| TS | 33.105 | Cryptographic Algorithm requirements | S3 | Yes |
| TS | 33.106 | Lawful interception requirements | S3 | Yes |
| TS | 33.107 | Lawful interception architecture and functions | S3 | Yes |
| TS | 33.120 | Security Objectives and Principles | S3 | Yes |
| TS | 33.200 | Network Domain Security - MAP | S3 | Yes |
| TR | 33.800 | Principles for Network Domain Security | S3 | No |
| TR | 33.901 | Criteria for cryptographic Algorithm design process | S3 | Yes |
| TR | 33.902 | Formal Analysis of the 3G Authentication Protocol | S3 | Yes |
| TR | 33.903 | Access Security for IP based services | S3 | Yes |
| TR | 33.904 | Report on the Evaluation of 3GPP Standard Confidentiality and Integrity Algorithms | S3 | Yes |
| TR | 33.908 | 3G Security; General report on the design, specification and evaluation of 3GPP standard confidentiality and integrity algorithms | S3 | Yes |
| TR | 33.909 | 3G Security; Report on the design and evaluation of the MILENAGE algorithm set; Deliverable 5: An example algorithm for the 3GPP authentication and key generation functions | S3 | Yes |
| TS | 34.108 | Common Test Environments for User Equipment (UE) Conformance Testing | T1 | Yes |
| TS | 34.109 | Logical Test Interface (TDD and FDD) | R2 | Yes |
| TS | 34.121 | Terminal Conformance Specification, Radio Transmission and Reception (FDD) | T1 | Yes |
| TS | 34.122 | Terminal Conformance Specification, Radio Transmission and Reception (TDD) | T1 | Yes |
| TS | 34.123-1 | UE conformance specification; Part 1: Conformance specification | T1 | Yes |
| TS | 34.123-2 | UE conformance specification; Part 2: Implementation conformance statement (ICS) | T1 | Yes |
| TS | 34.123-3 | UE conformance specification; Part 3: Abstract test suites (ATSs) | T1 | Yes |
| TS | 34.124 | Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment | R4 | Yes |
| TR | 34.910 | Conformance Test specifications – Relevant for Regulatory use | T1 | Yes |

| | | | | |
|----|--------|---|----|-----|
| TR | 34.926 | Table of international EMC requirements | R4 | Yes |
| TS | 35.201 | Specification of the 3GPP confidentiality and integrity algorithms; Document 1: f8 and f9 specifications | S3 | Yes |
| TS | 35.202 | Specification of the 3GPP confidentiality and integrity algorithms; Document 2: Kasumi algorithm specification | S3 | Yes |
| TS | 35.203 | Specification of the 3GPP confidentiality and integrity algorithms; Document 3: Implementors' test data | S3 | Yes |
| TS | 35.204 | Specification of the 3GPP confidentiality and integrity algorithms; Document 4: Design conformance test data | S3 | Yes |
| TR | 35.205 | 3G Security; Specification of the MILENAGE Algorithm Set: An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: General | S3 | Yes |
| TS | 35.206 | 3G Security; Specification of the MILENAGE algorithm set: An example algorithm Set for the 3GPP Authentication and Key Generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 2: Algorithm specification | S3 | Yes |
| TS | 35.207 | 3G Security; Specification of the MILENAGE algorithm set: An example algorithm Set for the 3GPP Authentication and Key Generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 3: Implementors' test data | S3 | Yes |
| TS | 35.208 | 3G Security; Specification of the MILENAGE algorithm set: An example algorithm Set for the 3GPP Authentication and Key Generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 4: Design conformance test data | S3 | Yes |
| TR | 35.909 | 3G Security; Specification of the MILENAGE algorithm set: an example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 5: Summary and results of design and evaluation | S3 | Yes |

Annex A (informative): Change history

| Change history | | | | | |
|----------------|---------|-----------|-----------|-------------|---|
| TSG SA# | Version | CR | Tdoc SA | New Version | Subject/Comment |
| SP-11 | 2.2.0 | - | SP-010211 | 4.0.0 | Approved and placed under TSG SA Change Control (Rel-4) |
| SP-12 | 4.0.0 | 001 r2 | SP-010396 | 4.1.0 | Correction to list of specs |
| SP-13 | 4.1.0 | 003 r1 | SP-010534 | 4.2.0 | Correction to list of specs |
| | | | | | |

History

| Document history | | |
|-------------------------|----------------|-------------|
| V4.0.0 | March 2001 | Publication |
| V4.1.0 | July 2001 | Publication |
| V4.2.0 | September 2001 | Publication |
| | | |
| | | |