Technical Specification Group Services and System Aspects
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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.

3G TS 21.101 V2.3.0 (2000-03)

Technical Specification

3rd Generation Partnership Project;
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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 3rd 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 6th 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 3rd 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 3rd 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 3rd 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

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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.

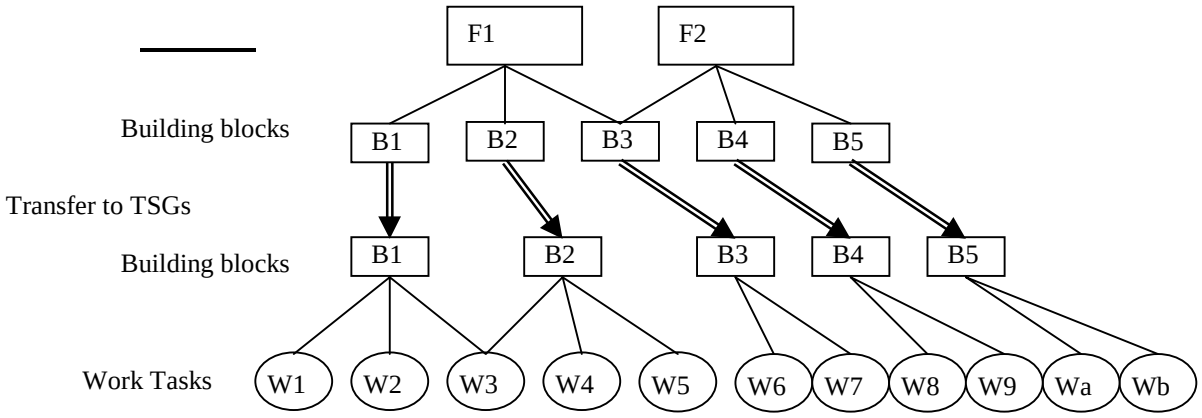
The TSGs and their WGs treats the building block as one or several dedicated Work Tasks (WT). Typical output of a given Work Task would be new specification(s), updated specification(s), technical report(s) or the conclusion that the necessary support already is provided in the existing specifications.

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 #5.