ETSI TECHNICAL COMMITTEE REFERENCE TECHNICAL REPORT

TCR-TR 015

October 1994

Source: ETSI TC-SMG

Reference: DTR/SMG-050001

ICS: 33.060.30

Key words: Universal Mobile Telecommunications System (UMTS), work programme

Special Mobile Group (SMG); Work programme for the standardization of the Universal Mobile Telecommunications System (UMTS)

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE
Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE
X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

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

Contents

Blank page

Foreword

This Technical Committee Reference Technical Report (TCR-TR) was prepared by the Special Mobile Group (SMG) Technical Committee of the European Telecommunications Standards Institute (ETSI).

A TCR-TR is a deliverable for use inside ETSI which records output results of ETSI Technical Committee (TC) or SubTechnical Committee (STC) studies which are not appropriate for European Telecommunication Standard (ETS), Interim European Telecommunication Standard (I-ETS) or ETSI Technical Report (ETR) status. They can be used for guidelines, status reports, co-ordination documents, etc. They are to be used to manage studies inside ETSI and are mandatory for concerned TCs. They shall also be utilised by the TC with overall responsibility for a study area for co-ordination documents (e.g. models, reference diagrams, principles, structures of standards, framework and guideline documents) which constitute the agreed basis for several, if not all, TCs and STCs to pursue detailed standards.

Introduction

The Universal Mobile Telecommunications System (UMTS) is envisaged as the third generation mobile telecommunications system to follow in Europe after the second generation systems like GSM, DCS 1800, DECT, etc.

The UMTS system is considered as a new generation system, and is foreseen to integrate the different applications for the various second generation systems into one system. UMTS is also aimed at world-wide standards, giving users the possibility for roaming also outside Europe.

At a global level, ITU-RS TG 8/1 (previously CCIR TG 8/1 and CCIR IWP 8/13) has for several years been working on the Future Public Land Mobile Telecommunications Systems (FPLMTS) in co-operation with other parts of the ITU, and within Europe, research has been carried out on UMTS for several years within the RACE (Research and development programme on Advanced Communications technologies for Europe) project. The standardization of UMTS within ETSI is started to reflect these activities.

The overall responsibility for the standardization of UMTS within ETSI has been given to TC SMG, which in turn has set up SMG 5 to carry out this work.

Blank page

1 Scope

This ETSI Technical Committee Reference Technical Report (TCR-TR) describes the work programme for the standardization of the Universal Mobile Telecommunications System (UMTS) to be carried out by ETSI. It is envisaged that the work will be carried out in close co-operation with the work on Future Public Land Mobile Telecommunications Systems (FPLMTS) within the ITU.

This UMTS work programme is to be used for day-to-day programme management purposes and will be maintained by SMG 5. It will continuously be updated and will be published to a wider audience at regular intervals as new releases of the same UMTS work programme.

This UMTS work programme should not be confused with the EWP (the ETSI Work Programme), which is more of an administrative nature and has other objectives. There are items in this UMTS work programme of no direct impact on the EWP and vice versa, however, an attempt has been made to make this UMTS work programme a practical interface to the EWP.

This UMTS work programme contains short-term and long-term documentation, the time scales for their production, as well as allocation of responsibilities. In some cases, in particular for the short-term documentation, exact deliverables have been identified, while for the more long-term documentation only work areas identified for potential standards have been identified.

2 Milestones

The main milestones identified for the standardization of UMTS are included in Annex A. The overall time scales for the UMTS system indicate first possible operation around the year 2000 or later. It should be noted that, as the work on UMTS has to be carried out in close relation with ITU-R TG 8/1 and other regional standardization bodies, the given dates for these milestones are to be aligned with the work programmes of these bodies. Furthermore, the UMTS milestones identified do **not** correspond to milestones as used for deliverable management in the ETSI Work Programme.

ETSI work programme sheets will be developed specifying in detail the deliverables and the related dates. In the development of these, the market demand for various parts of the UMTS standards has to be taken into account, taking into consideration the market situation for existing mobile systems, as well as the availability of frequencies for UMTS.

These aspects may lead to the definition of dates in ETSI work programme sheets, differing from those indicated in Annex A.

3 Documentation

3.1 General

The documentation for UMTS will generally contain two types of deliverables:

1) Baseline material:

   This material will consist of some form of Technical Reports, typically ETSI Technical Reports (ETRs), containing material for key decisions, or work leading up to these, overall framework and requirements etc.

2) Standards:

   This material will typically consist of European Telecommunications Standards (ETSs), and in exceptional cases Technical Basis for Regulations (TBRs), containing material for the exact definition of the system.

The UMTS system standard will be defined to the degree necessary for compatibility and international roaming. Open network interfaces are also desirable. For practical reasons, the UMTS system standard will further be developed in phases corresponding to the implementation phases of UMTS. This will be identified in the ETSI deliverable numbering, for example, the deliverable numbers of a phase 1 UMTS standard, shall be different from those of a phase 2 UMTS standard.

3.2 Details of the UMTS work programme

The detailed UMTS work programme is included in Annex B. The work programme is split into baseline material (typically ETRs) and standards (typically ETSs) as above. The standards are again divided into a set of technical areas as in the following subclauses.

NOTE: Currently, only indications about the contents of the technical areas for the standards material are given. It should be noted that the exact contents and subdivisions of the technical areas will continuously evolve. Each technical area may contain one or several standards.

The work programme contains primary and secondary **technical** responsibilities, version numbers and finalization dates for each deliverable. Primary technical responsibility is referred to the ETSI group which is carrying out the main part of the technical work on the deliverable, while secondary technical responsibility is referred to the ETSI groups with the most significant responsibility for consulting in a specific technical area. It should, however, be noted that the ultimate **approval** responsibility is with SMG 5 as UMTS system architect and TC SMG as system responsible TC.

The finalization dates indicated in Annex B refer to the time when the UMTS deliverables are submitted to TC SMG for approval. No other deliverable milestones are included in this UMTS work programme. EWP deliverable milestones before TC SMG approval will, however, occur before the identified dates for TC SMG approval, including potential processing in other TCs/STCs, if appropriate. Depending on the deliverable type, the UMTS deliverable may after TC SMG approval be passed on further from TC SMG to the TCC for final approval.

All deliverables in this UMTS work programme are allocated an SMG 5 internal deliverable number in the format UMTS ab-cd, with a corresponding ETSI standard deliverable number of the format:

- "deliverable_type" /SMG-05abcd (for baseline material);

- "deliverable_type" /SMG-05pabcd-nn (for standards).

Where the digit p represents the standardization phase of the UMTS standard (p=1 represents, for example, a phase 1 UMTS standard) and where nn represents the ETS part number.

An internal UMTS or SMG-05 number is given to a UMTS deliverable even if the deliverable is actually produced by another STC than SMG 5. This is in order to keep a consistent top-down perspective of all ETSI deliverables for UMTS. UMTS deliverable version numbers are given in the format x.y.z, which is the standard numbering scheme used within TC SMG. The digit x is awarded by TC SMG, SMG 5, an SMG 5 Working Group or the editor, as appropriate, and can have the values 0-3. The digit 0 means preliminary draft. The digit 1 means early draft and is awarded by the WG, if applicable, or the editor, as appropriate, and means that the document is more than 50% stable and complete, The digit 2 means final draft (ready for TC approval) and is awarded by SMG 5. Finally, the digit 3 means approved by TC SMG. The digits y and z are allocated freely by the editor of the document. A change in y means a change of substance, and a change in z means editorial change. Even the smallest change to the text is regarded as an editorial change.

This UMTS work programme fits into the overall ETSI Work Programme (the EWP) as follows. All UMTS deliverables have deliverable numbers of the formats shown above as SMG 5 deliverable numbers, corresponding to the UMTS ab-cd number. For those UMTS deliverables for which a technical responsibility lies with an STC other than SMG 5, whether this STC has primary or secondary technical responsibility, this STC may have its own corresponding internal EWP references of the type MI (Miscellaneous Item), e.g. MI/NA-7xxxx, depending on whether or not the UMTS involvement is judged sufficiently important by the respective STC.

The following sections refer to ETSs in Annex B, Clause B.2. These ETSs are derived from baseline material given in Annex B, Clause B.1. Generally, the ETSs cover the terrestrial as well as satellite components of UMTS. Specific satellite aspects are covered in a separate series of ETSs (the UMTS 12-series).

3.2.1 General

No ETSs are currently foreseen on general aspects of UMTS.

3.2.2 Service aspects

One or several ETSs will be needed on service aspects of UMTS. This contains technical issues as perceived by the UMTS users (stage 1 type), and includes the framework of services, terminals and environments that the UMTS system will support, the description of the services supported etc. These ETSs are contained in the UMTS 02-series of ETSs.

3.2.3 Network aspects

One or several ETSs will be needed on network aspects of UMTS. This includes network architecture's, overall realization of services in the network etc. (stage 2 type). These ETSs are contained in the UMTS 03-series of ETSs. Alignment with evolutionary architectures (IN) needs to be pursued.

3.2.4 Radio aspects

One or several ETSs will be needed on radio aspects of UMTS. This includes the description of the physical radio structure, the radio interface protocols etc. These ETSs are contained in the UMTS 04-series of ETSs.

3.2.5 Network management aspects

One or several ETSs will be needed on network management aspects of UMTS. This includes the TMN framework for UMTS, requirements on operations, administration, maintenance and management of the system etc. These ETSs are contained in the UMTS 05-series of ETSs.

3.2.6 Voice-band aspects

One or several ETSs will be needed on voice-band aspects of UMTS. Voice-band refers to any signal within the band 300 - 3 400 Hz. This includes description of speech codecs, other codecs, and related issues. These ETSs are contained in the UMTS 06-series of ETSs.

3.2.7 Video aspects

One or several ETSs will be needed on video aspects of UMTS. This includes description of video codecs and related issues. These ETSs are contained in the UMTS 07-series of ETSs.

3.2.8 Data aspects

One or several ETSs will be needed on data aspects of UMTS. This includes description of data transmission and adaptation functions and related issues. These ETSs are contained in the UMTS 08-series of ETSs.

3.2.9 Security aspects

One or several ETSs will be needed on specific security aspects of UMTS. This includes the detailed realization of the various security mechanisms in UMTS, like encryption and authentication algorithms etc. These ETSs are contained in the UMTS 09-series of ETSs. General security aspects are otherwise planned to be integrated in the other ETSs throughout the whole series of ETSs.

3.2.10 Conformance specifications

One or several ETSs (or Technical Bases for Regulation (TBRs)) will be needed on conformance specifications for UMTS in order to achieve Pan-European roaming. This contains conformance specifications for various mobile terminals to be used in the formal type approval procedures, and possibly also for base stations and other equipment in the network. These ETSs are contained in the UMTS 10-series of ETSs.

3.2.11 Network signalling specifications

One or several ETSs will be needed on network signalling specifications for UMTS. This includes the detailed realization of the UMTS services (stage 3 type) in the network over various network interfaces. These ETSs are contained in the UMTS 11-series of ETSs. Evolutionary protocols (INAP, MAP) need to be considered.

3.2.12 Satellite aspects

One or several ETSs will be needed on satellite specific aspects of UMTS. This may include those issues for satellites which are clearly satellite specific, like feeder links, inter-satellite links etc, provided these issues are subject to standardization within the context of UMTS. These satellite specific ETSs are contained in the UMTS 12-series of ETSs. General satellite aspects are otherwise planned to be integrated in the other ETSs throughout the whole series of ETSs.

3.2.13 Audio aspects

One or several ETSs will be needed on audio aspects of UMTS. Audio refers to all analogue signals within the frequency range of human hearing not covered in the section on voice-band aspects above. This includes description of audio codecs and related issues. These ETSs are contained in the UMTS 13-series of ETSs.

3.2.14 Multi-media aspects

One or several ETSs will be needed on multi-media aspects of UMTS. Multi-media refers to handling of combinations of multiple service information categories in a given communication. These ETSs are contained in the UMTS 14-series of ETSs.

3.2.15 Interworking aspects

One or several ETSs will be needed on interworking aspects of UMTS. This includes service, network and protocol interworking issues. These ETSs are contained in the UMTS 15-series of ETSs.

3.2.16 Terminal aspects

One or several ETSs will be needed on terminal aspects of UMTS. These ETSs are contained in the UMTS 16-series of ETSs.

4 Working structure

TC SMG has been given the mandate to study and define the third generation mobile system UMTS, and SMG 5 has been set up to reflect this task. The terms of reference for SMG 5 are included in Annex D. The work on UMTS is a concrete task, which will require a great amount of work in a wide range of technical areas. The work will therefore need to be well co-ordinated and organized, internally and externally, to best carry out the task.

Within TC SMG, the following general guidelines for the work on UMTS apply:

- TC SMG has been given the mandate for the standardization of UMTS by the ETSI Technical Assembly, and is thus the primary responsible body for the system;

- within TC SMG, the overall responsibility for the study and design of the UMTS standard resides with SMG 5. SMG 5 is the system architect for UMTS;

- for the UMTS standardization work, the expertise of the existing SMG STCs and other STCs outside SMG will be used as far as relevant;

- as regards UMTS matters, SMG 5 co-ordinates within and outside TC SMG and its STCs the contributions to and from the ITU, RACE, etc.;

- the baseline material in the UMTS work programme is the primary responsibility of SMG 5, with secondary responsibility for the appropriate other STCs;

- concerning the standards within the mandate of TC SMG or other TCs in the UMTS work programme, a flexible approach will be taken to the work sharing within TC SMG. Other STCs, as well as SMG 5, may have a primary responsibility, and the work will be carried out in close co-ordination.

Within the whole of ETSI, SMG 5 co-ordinates the work on UMTS and maintains a consistent work programme. When appropriate, e.g. when a detailed knowledge of a particular technology is required, SMG 5 shall request assistance from a TC other than SMG for assistance in the production of deliverables identified in the UMTS work programme. In addition, SMG 5 keeps direct liaisons with TCs and STCs outside SMG, when appropriate. See also SMG 5's Terms of Reference in Annex D.

Annex A (informative): Milestones for the standardization of UMTS1)

Preparatory meeting of SMG 5:	End 91
First overall system objectives set (CCIR):	Mid 92
Spectrum identified by WARC:	Mid 92
Initial UMTS work programme agreed in ETSI:	Mid 93
Initial spectrum usage principles defined:	Mid 93
Overall system framework defined:	Mid 94
Framework of services and facilities defined:	Mid 94
Security principles defined:	Mid 94
Initial UMTS vocabulary defined:	Mid 94
Network functions/procedures defined:	End 94
Radio interface requirements defined:	End 94
Network interworking scenarios defined:	End 94
Framework for satellite integration defined:	End 94
Network management principles defined:	End 94
Choice of radio access principles:	Mid 95
Choice of speech/channel coding principles:	Mid 95
Data services principles defined:	Mid 95
Detailed security requirements defined:	Mid 95
Initial UMTS performance specification defined:	Mid 95
Choice of speech/channel coding algorithms:	End 95
Physical radio access structure defined:	Mid 96
Radio interface protocols defined :	End 96
Complete voice-band aspects defined:	End 96
Security algorithms defined:	End 96
Video coding issues defined:	End 96
Audio coding issues defined:	End 96
Network protocols ready:	Mid 97
Data services issues ready:	Mid 97
Detailed network management requirements ready:	End 97
UMTS vocabulary finalized:	Mid 97
Physical radio access performance ready:	End 97
Complete video aspects ready:	End 97
Complete audio aspects ready:	End 97
Conformance specifications ready:	End 98
Possible start of service:	2000 - 2005

---

1) See comments in Clause 3.

Annex B (informative): Deliverables for UMTS standardization

B.1 Baseline material

Table B.1

UMTS Del Work item ref [type No]	UMTS title:	Technical Responsibility First:	Second:	Latest version:	Planned for TC SMG approval:	Approved by TC SMG:
TR's 00	ADMINISTRATIVE					
TCRTR 00-01 DTR/SMG-050001 [TCR-TR 015]	Work programme for the standardization of the Universal Mobile Telecommunications System (UMTS)	SMG 5	*	3.0.0	06/93	06/93
TCTR 00-02 DTR/SMG-050002 [TC-TR 001]	Co-ordination guideline for SMG on UMTS with respect to ITU and European research programmes (Published 8/1993)	SMG 5	*	3.0.0	12/92	01/93
ETR's 01	GENERAL					
ETR 01-01 DTR/SMG-050101	Objectives and overview of the Universal Mobile Telecommunications System (UMTS)	SMG 5	SMG 1	0.11.0	10/94	-
ETR 01-02 DTR/SMG-050102	Vocabulary for the Universal Mobile Telecommunications System (UMTS)	SMG 5	*	0.4.0	10/94	-
ETR 01-03 DTR/SMG-050103	System requirements of UMTS	SMG5	SMG 1	0.0.1	10/94	-
ETR's 02	SERVICE ASPECTS					
ETR 02-01 DTR/SMG-050201	Framework for services to be supported by the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG1, SES, SMG4, NA1	0.3.1	10/94	-
ETR's 03	NETWORK ASPECTS					
ETR 03-01 DTR/SMG-050301	Framework of network architecture, interworking and integration for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG3,4,6, SES, NA6	0.7.0	12/94	-
ETR's 04	RADIO ASPECTS					
ETR 04-01 DTR/SMG-050401	Overall requirements on the radio interface(s) of the Universal Mobile Telecommunications System (UMTS)	SMG5	SMGall, SES	0.7.2	12/94	-
ETR 04-02 DTR/SMG-050402	Selection procedures for the choice of physical radio access principles for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG2	0.7.0	06/95	-

(continued)

Table B.1 (concluded)

UMTS Del Work item ref [type No]	UMTS title:	Technical Responsibility First:	Second:	Latest version:	Planned for TC SMG approval:	Approved by TC SMG:
ETR 04-03 DTR/SMG-050403	Choice of radio access principles for the interfaces of the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG2	0.0.2	06/95	-
ETR 04-04 DTR/SMG-050404	Choice of source and channel coding principles for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG2	*	06/95	-
ETR's 05	NETWORK MANAGEMENT ASPECTS					
ETR 05-01 DTR/SMG-050501	Objectives and framework for the TMN of the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG6, NA4	0.3.0	12/94	-
ETR's 06	VOICE-BAND ASPECTS					
ETR 06-01 DTR/SMG-050601	Selection procedures for the choice of speech/channel coding principles for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG2,SES	0.4.0	12/94	-
ETR 06-02 DTR/SMG-050602	Quality requirements and selection procedure for the support of voice-band data coding for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG1		12/94	-
ETR's 07	VIDEO ASPECTS					
ETR 07-01 DTR/SMG-050701	Selection procedures for the choice of video/ channel coding principles for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG2, SMG4		10/96	-
ETR's 08	DATA ASPECTS					
ETR 08-01 DTR/SMG-050801	Principles for handling of data services in the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG4,SES	0.2.0	12/94	-
ETR's 09	SECURITY ASPECTS					
ETR 09-01 DTR/SMG-050901	Security principles for the Universal Mobile Telecommunications System (UMTS)	SMG5	SMG1,3,6 STAG, NA6	0.3.0	10/94	-
ETR 09-02 DTR/SMG-050902	Security studies for the Universal Mobile Telecommunications System (UMTS)	SMG5	STAG,. NA6	0.0.1	10/94	-
ETR's 12	SATELLITE ASPECTS					
ETR 12-01 DTR/SMG-051201	Framework for satellite integration within the Universal Mobile Telecommunications System (UMTS)	SMG5	SES	0.6.0	12/94	-
ETR 12-02 DTR/SMG-051202	Technical characteristics, capabilities and limitations of mobile satellite systems applicable to the Universal Mobile Telecommunications System (UMTS)	SMG5	SES	0.4.0	10/94	-

B.2 Standards

Table B.2

UMTS Del Work item ref	UMTS title:	Technical Responsibility First:	Second:	Latest version:	Planned for TC SMG approval:	Approved by TC SMG:
ETS 01-xx	GENERAL					-
reserved for future use						
ETS 02-01	SERVICE ASPECTS					-
DE/SMG-0510201-nn	(where nn = ETS part number e.g. 01)					
part 01	Service accessibility	SMG5	SMG1,SES5	*	12/94	
part 02	Bearer services	SMG1	SMG5,NA1	*	12/96	
part 03	Teleservices	SMG1	SMG5,NA1	*	12/96	
part 04	Supplementary services	SMG1	SMG5,NA1	*	12/96	
part 05	Support of UPT	SMG5	SMG1,NA7	*	06/95	
part 06	Quality of service	SMG1	SMG5,SES5	*	06/97	
part 07	Types and features of Mobile Stations or mobile earth stations	SMG5	SMG1,SES5	*	12/94	
part 08	Service requirements on security	SMG5	SMG1,SES5	*	12/94	
part 09	Numbers and identities	SMG5	SMG1,NA2	*	12/94	
part 10	Charging, billing and accounting principles	SMG1	SMG5	*	12/94	
part 11	Man-Machine Interface	SMG5	SMG1,HF	*	06/97	
part 12	Evolution of service	SMG5	SMG1	*	06/97	
part 13	Subscriber and service profile requirements	SMG5	SMG1	*	12/94	
part 14	UMTS User Identity Modules	SMG5	SMG1	*	12/94	
ETS 03-01	NETWORK ASPECTS					-
DE/SMG-0510301-nn						
part 01	UMTS functional model and network architecture	SMG5,NA6	SMG3,SES5		06/95	
part 02	Numbering, addressing and identification	NA2	SMG5	*	06/95	
part 03	Relationship with UPT	SMG5	NA7	*	06/95	
part 04	IN and B-ISDN concepts in a UMTS environment	SMG5	NA6/NA5	*	06/95	
part 05	UMTS data organization	SMG5	SMG3	*	06/95	
part 06	UMTS operations and procedures	SMG3	SMG5,NA6	*	06/95	
part 07	Signalling requirements for UMTS	SMG3	SPS/SMG5,SES5		06/95	
part 08	Network performance requirements	SMG5	SMG3	*	06/95	
part 09	Transmission requirements	TM5	SMG5, SES5	*	12/96	
part 10	Network functions relevant to Satellites	SMG5	SES5	*	06/95	

(continued)

Table B.2 (continued)

UMTS Del Work item ref	UMTS title:	Technical Responsibility First:	Second:	Latest version:	Planned for TC SMG approval:	Approved by TC SMG:
ETS 04-01 DE/SMG-0510401-nn	RADIO ASPECTS (where nn = ETS part number e.g. 01)					-
part 01	Framework of radio system	SMG5	SMG2,SES5	*	12/95	
part 02	Multiplexing and multiple access	SMG2	SMG5,SES5	*	06/96	
part 03	Channel coding	SMG2	SMG5,SES5	*	06/96	
part 04	Modulation	SMG2	SMG5,SES5	*	06/96	
part 05	Transmission and reception	SMG2	SMG5,SES5	*	12/97	
part 06	Radio channel performance requirements	SMG2	SMG5,SES5	*	12/97	
part 07	Physical link control	SMG2	SMG5,SES5	*	12/97	
part 08	Synchronization	SMG2	SMG5,SES5	*	06/96	
part 09	Radio interface protocols, layer 1	SMG2	SMG5,SES5	*	12/96	
part 10	Radio interface protocols, layer 2	SMG3	SMG5/2,SES5	*	12/96	
part 11	Radio interface protocols, layer 3	SMG3	SMG5/2,SES5	*	12/96	
ETS 05-01 DE/SMG-0510501-nn	NETWORK MANAGEMENT ASPECTS					-
part 01	Overall TMN framework	SMG5	SMG6/NA4	*	06/95	
part 02	Subscriber, Mobile Equipment and Service data administration	SMG6	SMG5/NA4	*	12/97	
part 03	Subscriber Related Event and Call Data	SMG6	SMG5/NA4	*	12/97	
part 04	Security management	SMG6	SMG5/NA4	*	12/97	
part 05	Performance management	SMG6	SMG5/NA4	*	12/97	
part 06	System Configuration Management and Administration	SMG6	SMG5/NA4	*	12/97	
part 07	Maintenance of UMTS Infrastructure	SMG6	SMG5/NA4	*	12/97	
part 08	UMTS Management Information	SMG6	SMG5/NA4	*	12/97	
ETS 06-01 DE/SMG-0510601-nn	VOICE-BAND ASPECTS					-
part 01	Speech codec description	SMG5	TM5/SMG2,SES5		12/95	
part 02	Voice Activity Mechanisms	SMG5	TM5/SMG2,SES5		12/96	
part 03	Echo control	SMG5	TM5/SMG2,SES5		12/96	
ETS 07-01 DE/SMG-0510701-nn	VIDEO ASPECTS					-
part 01	Video codec description	SMG5	NA5/SMG2	*	12/97	
ETS 08-01 DE/SMG-0510801-nn	DATA ASPECTS				-	
part 01	UMTS connection types	SMG5	SMG4/3,SES5	*	06/95	
part 02	Terminal adaptation functions	SMG4	SMG5/3,SES5	*	06/97	

(continued)

Table B.2 (concluded)

UMTS Del Work item ref	UMTS title:	Technical Responsibility First:	Second:	Latest version:	Planned for TC SMG approval:	Approved by TC SMG:
ETS 09-01 DE/SMG-0510901-nn	SECURITY ASPECTS (where nn = ETS part number e.g. 01)					
part 01	Security for UMTS	SMG5	STAG	*	12/95	-
part 02	Security algorithms for UMTS	SAGE	SMG5	*	12/96	
ETS 10-01 DE/SMG-0511001-nn	CONFORMANCE SPECIFICATIONS					-
part 01	Mobile Station specifications	SMG5	SMGall	*	12/98	
part 02	Base Station specifications	SMG5	SMGall	*	12/97	
part 03	User Identity Module specifications	SMG5	SMGall/TE9	*	12/97	
part 04	Other equipment specifications	SMG5	SMGall	*	12/97	
part 05	Mobile earth station specifications	SES5	SMGall	*	12/98	
ETS 11-01 DE/SMG-0511101	NETWORK SIGNALLING SPECIFICATIONS					-
	Network interfaces	SPS	SMG3/4/5	*	06/97	
ETS 12-01 DE/SMG-0511201-nn	SATELLITE ASPECTS					-
part 01	Satellite feeder links	SMG5	SES/SMG2	*	06/96	
part 02	Inter-satellite links	SMG5	SES/SMG2	*	06/96	
part 03	Satellite space segment functions	SMG5	SES/SMG2/3	*	06/96	
ETS 13-01 DE/SMG-0511301 to be inserted	AUDIO ASPECTS	SMG5	TM5/SMG2	*	12/97	-
ETS 14-01 DE/SMG-0511401 to be inserted	MULTI-MEDIA ASPECTS	SMG5	*	*	*	-
ETS 15-01 DE/SMG-0511501-nn	INTERWORKING ASPECTS					-
part 01	General UMTS interworking issues	SMG5	SMG4/3,SES5,NA6	*	06/95	
part 02	Detailed UMTS interworking issues	SMG4	SMG5/3,NA6	*	06/97	
ETS 16-01 DE/SMG-0511601 to be inserted	TERMINAL ASPECTS	SMG5	*	*		-

Annex C (informative): Overview of SMG5 work items and rapporteurs

Table C.1

item:	**W**ork item **R**eference no:	**T**itle:	**R**apporteur:
A. BASELINE MATERIAL			
1	**DTR/SMG**-050001	**W**ork programme for the standardization of the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**C**hairman **SMG 5**
2	**DTR/SMG**-050002	**C**o-ordination guideline for **SMG** on **UMTS** with respect to **ITU** and **E**uropean research programmes	**C**hairman **SMG 5**
3	**DTR/SMG**-050101	**O**bjectives and framework of the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Dr R F**rench
4	**DTR/SMG**-050102	**UMTS** vocabulary	**Mr G G**rotelüschen
5	**DTR/SMG**-050103	**U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**) **S**ystem requirements	**Mr D R**ichards
6	**DTR/SMG**-050201	**F**ramework for services to be supported by the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr R F**orbes
7	**DTR/SMG**-050301	**F**ramework of network architecture, interworking and integration for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr N** Lobley
8	**DTR/SMG**-050401	**O**verall requirements on the radio interface(s) of the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr C M**ansfield
9	**DTR/SMG**-050402	**S**election procedures for the choice of physical radio access principles for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Dr J** Gibbs
10	**DTR/SMG**-050403	**C**hoice of physical radio access principles for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Dr M W**erner
11	**DTR/SMG**-050404	**C**hoice of source and channel coding principles for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	[tbd]

(continued)

Table C.1 (continued)

item:	**W**ork item Reference no:	**T**itle:	**R**apporteur:
12	**DTR/SMG**-050501	**O**bjectives and framework for the **TMN** of the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr P M**ieybegue
13	**DTR/SMG**-050601	**S**election procedures for the choice of speech/channel coding principles for the **U**niversal **M**obile telecommunications **S**ystem (**UMTS**)	**DR R F**rench
14	**DTR/SMG**-050602	**Q**uality requirements and selection procedures for the support of voice band data coding for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr D R**ichards
15	**DTR/SMG**-050701	**S**election procedures for the choice of video/channel coding principles for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr A**mir **A**likhani
16	**DTR/SM**G-050801	**P**rinciples for handling of data services in the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Ms L**ainig
17	**DTR/SM**G-050901	**S**ecurity principles for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr M W**alker
18	**DTR/SMG**-050902	**S**ecurity studies for the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Mr T B**aritaud
19	**DTR/SMG**-051201	**F**ramework for satellite integration within the **U**niversal **M**obile **T**elecommunications **S**ystem (**UMTS**)	**Dr A K**okkos
20	**DTR/SMG**-051202	**T**echnical characteristics, capabilities and limitations of mobile satellite systems applicable to the **U**niversal **M**obile Telecommunications **S**ystem (**UMTS**)	**Dr C W**ildey

(continued)

Table C.1 (concluded)

item:	**W**ork item **R**eference no:	**T**itle:	**R**apporteur:
B. PHASE 1 STANDARDS			
21	**DE/SMG**-0510201	**UMTS** service aspects	**Mr R F**orbes
22	**DE/SMG**-0510301	**UMTS** network aspects	**Mr T**urban
23	**DE/SMG**-0510401	**UMTS** radio aspects	**Mr N R**uelle
24	**DE/SMG**-0510501	**UMTS** network management aspects	**Mr P M**ieybegue
25	**DE/SMG**-0510601	**UMTS** voice-band aspects	**Dr R F**rench
26	**DE/SMG**-0510701	**UMTS** video aspects	[tbd]
27	**DE/SMG**-0510801	**UMTS** data aspects	**Ms E L**ainig
28	**DE/SMG**-0510901	**UMTS** security aspects	**Mr M W**alker
29	**DE/SMG**-0511001	**UMTS** conformance specifications	[tbd]
30	**DE/SMG**-0511101	**UMTS** network signalling specifications	[tbd]
31	**DE/SMG**-0511201	**UMTS** satellite aspects	**Dr A K**okkos
32	**DE/SMG**-0511301	**UMTS** audio aspects	[tbd]
33	**DE/SMG**-0511401	**UMTS** multi-media aspects	[tbd]
34	**DE/SMG**-0511501	**UMTS** interworking aspects	**Dr C W**ildey
35	**DE/SMG**-0511601	**UMTS** terminal aspects	[tbd]

Annex D (informative): Terms of Reference for ETSI/SMG5

(as reviewed by TC SMG, Madrid, September 1992)

D.1 Responsibility

SMG5 has a co-ordinating role for the Universal Mobile Telecommunications System (UMTS). Its main task is to study and define this third generation mobile system, based on the conclusions of ad-hoc group UMTS (as given in doc TC/RES(91)34 rev 1), in liaison with ITU studies on FPLMTS (see below) and other appropriate bodies.

D.2 Work plan

a) To study and define the third generation mobile system UMTS including:

- services;
- system architecture;
- air interface(s);
- network interfaces and support requirements;
- other interfaces as required.

b) When appropriate, to establish links with other ETSI Technical Committees. The objectives behind such links will be to make use of the expertise of other TCs on a consultancy basis, and where appropriate to subcontract out defined specialised tasks e.g. where a detailed knowledge of a particular technology is required.

c) To define any areas needing research, and to liaise with appropriate bodies (e.g. COST (European Co-Operation in the field of Scientific and Technical research), RACE) on the conduct of this research if necessary.

d) To work with worldwide standards bodies such as the ITU with the objective of establishing a common set of standards for third generation mobile systems. If it is desired to submit a European view to such bodies, then the ETSI procedures as laid down by the TA and the GA should be complied with. Informal arrangements where one ETSI member submits a contribution with the support of other members are also possible.

e) To specify European Telecommunication Standards based on the worldwide standards produced by the ITU.

f) To agree and keep under review a programme defining the work to be undertaken and the resources required to enable it to be successfully completed, and to submit such work programme for approval to TC SMG and to any other relevant bodies on a regular basis (e.g. annually).

D.3 Liaisons

SMG5 has direct liaisons with appropriate ETSI TCs and STCs on issues concerning UMTS. Examples are TCs NA, SPS, TE, RES and TM. In addition, SMG5 has direct liaison with CEPT/ERC on UMTS spectrum, and should further liaise with other regional/national standardization bodies on third generation mobile systems.

History

Document history	
October 1994	First Edition
March 1996	Converted into Adobe Acrobat Portable Document Format (PDF)