

Source: TSG_SA_WG1
Title: Work Items for UMTS
Document for: Approval
Agenda Item: 11

Enclosed is TSG_SA_WG1 Tdoc 090 with the following Work Items attached.

Specification	Document	WORK ITEMS	Source	Who?
22.00	98	UMTS Phase 1 Capabilities	France Telecom	David Verrier
22.01	99	UMTS Service Principles	Vodafone	Paul Dwyer
22.05	96	UMTS Services and Service capabilities	BT	Wayne Ashwell
22.15	93	Charging and Billing	TIM	Emanuele Montegrosso
22.21	101	Virtual Home Environment	Fujitsu	Jumoke Ogunbekun
22.25	71	Quality of Service	Ericsson	Olle Eriksson
22.29	97	Handover GSM<>UMTS	NEC	David Cooper
22.75	100	Advanced Addressing	MMO	Stephan Kleier
GSM Specs	102	Study of GSM 02-series specifications for UMTS	Nokia	Tommi Kokkola
TTA Specs	77	UMTS Interworking with IS 41	TTA	Chang Yong

Note: WIs documents shown above were modified to comply to the 3GPP Working Procedures, Article 38.

Agenda Item: 8
Source: Convenor
Title: **Work Items for UMTS**
Document for: Approval.

WG1 is required to define work packages and it is considered that the Work item Description sheet is the best way to list the relevant information for each package. It is suggested to use the SMG WID form with a change of header, unless a 3GPP WID is available. Each WID must describe the task, the reason, the impact, the timescale and nominate a rapporteur.

Since each work package needs an identified rapporteur, it is proposed that the WIDs be based on the present Technical Specifications of UMTS (TS 22 series), which in several cases include preparatory Technical Reports. Where there are actively supported Reports that are not associated with TSs, it may then also be appropriate to generate a WID. The rapporteurs of these Specifications and Reports are requested to prepare WIDs on this basis for submission to TSG SA#2. These WIDs may be based on existing WIDs from SMG for UMTS if suitable or else should be newly generated.

It is also proposed to have at this stage a single WID for evaluation of SMG specifications for transfer to UMTS. This work will involve identification of which specifications to transfer and whether all or just part is relevant, together with proposals for possible changes. Tommi Kokkola has kindly agreed to prepare this WID, but the responsibility for each GSM specification would remain with the rapporteur for that specification.

There will also be the possibility to maintain all specifications not covered by active work items, but this will not be separately described and clearly is ongoing, rather than with a target date for completion.

Additional work items may be proposed at any time and would normally be submitted by WG1 for approval by TSG SA. At present, the only known proposal is from TTA for interworking studies with IS-41 networks.

Wayne Ashwell has kindly agreed to generate a Project Plan for clear presentation of the progress of these WIDs.

Summary of WIDs

UMTS Phase 1	TS 22.00	David Verrier
UMTS Service Principles	TS 22.01	Paul Dwyer
UMTS Service Capabilities	TS 22.05	Wayne Ashwell
Charging and Accounting	TS 22.15	Emanuele Montegrosso
Virtual Home Environment	TS 22.21	Jumoke Ogunbekum
Handover	TS 22.29	David Cooper
Advanced Addressing	TR 22.75	Stephan Kleier
Quality of Service		Olle Eriksson
GSM to UMTS transfer		Tommi Kokkola
Interworking with IS-41 networks		TTA

Title

UMTS Phase 1 Capabilities

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

This specification will be based on the ETSI specification UMTS 22.00 which addresses the UMTS Phase 1 capabilities for RELEASE'99 and is the starting point of the set of specifications that define the UMTS service requirements for UMTS Phase 1. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

Technical Scope

The UMTS system will be defined in a phased approach. This document specifies the content of the first phase of requirements for UMTS. Some requirements affecting phase 1 to ensure a smooth transition to later releases are also indicated.

It includes requirements on services, UTRAN, Core Network, USIM and security features.

Teleservices and bearer services required for UMTS Phase 1 Release'99 are outlined. Migration from GSM services and bearer services to UMTS is also addressed.

Impact on Other 3GPP Work Items

This specification provides the guidelines for other TSGs and WGs for the definition of the first Release of UMTS.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	30/4/99	30/4/99

Note: * These dates are a guess at present

Supporting Individual Members

All WG1 members

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Title

UMTS Service Principles

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

This specification will be based on the ETSI specification UMTS 22.01 that defines UMTS Service Principles. Any other agreed requirements defined by the partners or individual members will be captured in this specification.

Technical Scope

The goal of standardisation with respect to services in UMTS is to define a framework within which proprietary services can be created and supported on all networks. Service principles are an agreed set of goals and ideas, which provide the complete high level view of services in UMTS. The requirements upon which more detailed standardisation work is based are defined by the service principles.

Impact on Other 3GPP Work Items

This specification provides the guidelines for other TSGs and WGs for the definition of the first Release of UMTS.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	30/4/99	30/4/99

Note: * These dates are a guess at present

Supporting Individual Members

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Rapporteur

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Title

UMTS Services and Service Capabilities

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

ETSI TS 22-05 (UMTS Services and Service Capabilities) will be used as the basis for this specification. Any relevant material in ETSI TR 22-25 (UMTS Quality of service and network performance) will be transferred into 22-05 and the TR will not be progressed in 3GPP. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

Technical Scope

Pre-UMTS systems have largely standardised the complete sets of bearer services, teleservices and supplementary services which they provide. One major difference between UMTS and pre-UMTS systems is that service capabilities rather than services are standardised for UMTS, allowing service differentiation and system continuity. This Technical Specification (TS) describes how and what kind of services the UMTS user has access to

Impact on Other 3GPP Work Items

This specification will define the services and service requirements which the architecture, networks, terminals etc will have to support.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Transfer of material from TR 22-25	22/2/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	26/4/99*	28/4/99

Note: * These dates are a guess at present

Supporting Individual Members

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Title

UMTS: Charging and Billing

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

ETSI TS 22-15 (UMTS Service Aspects: Charging and Billing) will be used as the basis for this specification. Any relevant material in ETSI TR 22-24 (UMTS Charging and Accounting Mechanisms) and ETSI TR 22-71 (Automatic Establishment of Roaming Relations) will be transferred into 22-15 and these TRs will not be progressed in 3GPP. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

Technical Scope

This Technical Specification describes the Service Aspects of charging and billing of the Universal Mobile Telecommunications System (UMTS).

This standard is not intended to duplicate existing standards or standards being developed by other groups on these topics, and will reference these where appropriate. It will allow the generation of accurate and incontestable charging information to be used in the commercial and contractual relationships between the parties concerned.

The main new requirements for UMTS charging and accounting are the following :

1. generation of standardised charging records based among other parameters on type of service (voice, data, multimedia, VAS, etc.) duration, traffic (volume, bit rate) and performance provided to the user.
2. support of on-line charging and accounting procedures for cost control and fraud control purposes
3. support of itemised billing
4. support of standardised procedures for the transfer of charging information between networks
5. support of roaming via third parties roaming platforms

Impact on Other 3GPP Work Items

This specification will define the services and service requirements which the architecture, networks, terminals etc will have to support.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Transfer of material from TR 22-24	22/2/99	5/3/99
Transfer of material from TR 22-71	22/2/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	30/4/99*	30/4/99

Note: * These dates are a guess at present

Supporting Individual Members

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Virtual Home Environment

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

ETSI TS 22-21 (Provision of Services in UMTS - The Virtual Home Environment) will be used as the basis for this specification. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

Technical Scope

This Technical Specification defines the stage one description of the Virtual Home Environment (VHE). Stage one is an overall service description, primarily from the point of view of the User in her Home Environment. The Virtual Home Environment (VHE) is defined as a concept for personalised service portability across network boundaries and between terminals. The concept of the VHE is such that users are consistently presented with the same personalised features, User Interface customisation and services in whatever network and whatever terminal (within the capabilities of the terminal), wherever the user may be located.

Impact on Other 3GPP Work Items

This specification will define the services and service requirements which the architecture, networks, terminals etc will have to support.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	6/7/99
Members and partners input and e-mail discussion	22/2/99	6/7/99
Review and resolution of issues at WG1 meeting	6/7/99	9/7/99
Presentation to other groups for comments	12/7/99*	30/9/99
Ad hoc meeting to resolve any final problems	30/4/99*	1/11/99
Submission to TSG SA for approval	1/11/99*	1/11/99

Note: * These dates are a guess at present

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Title

Quality of Service Requirements

Intended Output

Report

Impact on Other Technical Specifications and Technical Reports

This report may recommend changes to TS 22-05.

Technical Scope

UMTS 22.05 states requirements on bearer services and attributes, including QoS parameters.

The implementation of QoS mechanisms is specified by other groups. Experience from ETSI/SMG sub-groups has shown that it has been difficult to achieve a total correlation between QoS requirements and mechanisms respectively.

To improve this situation, this Work Item is defined to carefully study and formulate QoS requirements to both fulfill the needs of users and applications, and to give the necessary freedom for other groups to select the most appropriate implementation mechanisms(s).

QoS requirements need to be formulated to fulfill the needs of users and applications. To ensure that this will be the case, a working procedure shall be used including a careful analysis of those needs.

The QoS requirements shall be formulated such that higher level requirements in, e.g., UMTS 22.00 and UMTS 22.01 are fulfilled, e.g. regarding which types of applications to be supported and which types of external networks to be able to connect to.

The formulation of the QoS requirements needs to be done very carefully in a way that is independent of the implementation; both to force a consideration of what is needed rather than what technical options exist, and to provide a constant reference document which can allow for the technical evolution of the underlying network. This would then allow technical experts in other groups to select the most appropriate implementation mechanism(s) based on clearly expressed needs.

Impact on Other 3GPP Work Items

This report may be converted into a technical report at a later date and may identify changes to TS 22-05.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Preparation of first draft	1/3/99	4/6/99
Review and resolution of issues at WG1 meeting	7/6/99	11/6/99
Preparation of second draft	11/6/99*	15/10/99
Review and resolution of issues at WG1 meeting	16/10/99*	19/10/99
Submission to TSG SA for approval	30/10/99*	30/10/99

Note: * These dates are a guess at present

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Title

Handover Requirements between UMTS and GSM or Other Radio Systems

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

ETSI TS 22-29 (Handover Requirements between UMTS and GSM or Other Radio Systems) will be used as the basis for this specification. Any other agreed requirements defined by the other partners or individual members will be captured in this specification.

Technical Scope

The scope of this document includes service requirements for handover and roaming (terms that are defined below) within UMTS systems and between UMTS, other IMT-2000 family members and 2nd generation systems. Particular emphasis has been placed on the description of requirements for handover between UMTS and GSM but requirements specific to other systems are incorporated as required.

UMTS is a "third generation" mobile cellular radio telecommunications system which provides telecommunication and information services to wireless terminals. Mobile cellular systems have the defining characteristic that they are capable of maintaining continuity of service to a wireless terminal as it moves between the radio coverage area, or "cells", associated with different base station sites . This functionality is called "handover". Handover can also occur due to change of radio resource providing a service without necessarily any change of the base stations involved. In particular, when the radio resources providing a service change from one of the UTRA modes to the other (UTRA-FDD and UTRA-TDD), this is regarded as handover.

It is a key requirement of UMTS that it allows for dual or multi-mode (e.g. UMTS/GSM) terminals to handover traffic from UMTS to other radio systems such as GSM and visa versa. This document describes the service requirements for intra- and inter- system handover that shall be used by other SMG STCs to guide the implementation of UMTS-to-(e.g.) GSM handover specifications. It defines requirements for the enhancement of the GSM specifications to allow GSM-to-UMTS handover.

Impact on Other 3GPP Work Items

This specification will define the services and service requirements which the architecture, networks, terminals etc will have to support.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	5/3/99
Members and partners input and e-mail discussion	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Presentation to other groups for comments	16/3/99*	12/4/99
Ad hoc meeting to resolve any final problems	14/4/99*	16/4/99
Submission to TSG SA for approval	30/4/99	30/4/99

Note: * These dates are a guess at present

Supporting Individual Members

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Title

Advanced Addressing

Intended Output

Technical Report

Impact on Other Technical Specifications and Technical Reports

This report will be based on the ETSI specification UMTS 22.75. (Advanced Addressing). Any other agreed requirements defined by the other partners or individual members will be captured in this report.

Technical Scope

UMTS is a telecommunications system which allows person to person and machine to machine interactions. Addressing schemes allow users (people or machines) to indicate to the system the target of a particular communications session. Traditionally, this has involved a user dialling a telephone number to indicate the destination of a telephone call.

This report describes the desirable features of the UMTS advanced addressing scheme requirements for numbering and addressing for UMTS , and example directory, application and translation mechanisms which could be used to enhance the service to the customer.

A key requirement is the need for UMTS users to be able to interwork with users on legacy schemes. These would encompass telephony, data and multimedia.

The requirements developed in this report are to be used within 3GPP to develop a proposal for numbering and addressing applying existing schemes or developing new ones.

Impact on Other 3GPP Work Items

This report may be converted into a technical report at a later date.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Review of requirements from other partners input papers	22/2/99	6/7/99
Members and partners input and e-mail discussion	22/2/99	6/7/99
Review and resolution of issues at WG1 meeting	6/7/99	9/7/99
Presentation to other groups for comments	12/7/99*	30/9/99
Ad hoc meeting to resolve any final problems	30/4/99*	1/11/99
Submission to TSG SA for approval	1/11/99*	1/11/99

Note: * These dates are a guess at present

Supporting Individual Members

All WG1 members

Rapporteur

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Title

Study of GSM 02-series specifications for UMTS

Intended Output

Recommendation for disposition of existing standards

Impact on Other Technical Specifications and Technical Reports

Some ETSI standards may be adopted by 3GPP

Technical Scope

3GPP TSG SA WG1 (S1) is required to define services for UMTS. As 3GPP is producing the technical specifications for a 3rd generation mobile system based on the evolved GSM core networks, S1 need to study SMG 02-series specifications.

22-series UMTS specifications already reference several GSM 02-series specifications. The task of this work item is to finalise that work and to identify, which parts of 02-series GSM specifications are applicable to UMTS. Required modifications to these common GSM and UMTS specifications need be addressed. Further, it must be constantly verified that specifications within all TSGs is aligned in order to have complete and consistent set of specifications for release '99.

(Note: Scheme how changes to GSM specifications are managed needs to be agreed between ETSI and 3GPP, however this is not responsibility of S1.)

Impact on Other 3GPP Work Items

This work may generate new work items.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Off line review of standards	22/2/99	5/3/99
Review and resolution of issues at WG1 meeting	9/3/99	12/3/99
Preparation and review of Work Items	16/3/99*	30/4/99
Submission to TSG SA for approval	30/4/99*	30/4/99

Note: * These dates are a guess at present

Supporting Individual Members

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Title

UMTS Interworking with IS-41 networks

Intended Output

Technical Specification

Impact on Other Technical Specifications and Technical Reports

This specification will be based on TTA specifications.

Technical Scope

In Korea, there are only IS-41 Networks. In this environment, the interworking function with IS-41 networks is necessary in order to introduce the 3GPP system in Korea. In order to lead IMT-2000 systems, the general requirements for 3GPP service and system aspects must support functions and structures for interworking with another networks. Accordingly, 3GPP core network must support the interworking function with 3G IS-41 network.

The requirements for the roaming, the hand-over, and the interoperability of VHE in 3G networks will be described in this document on service requirements with the following priorities:

- Roaming (mandatory)
- Hand-over (optional)
- VHE Interoperability (optional)
- And so on(For Further Study)

Impact on Other 3GPP Work Items

This specification provides the guidelines for other TSGs and WGs for the definition of Architecture and Networks.

Schedule of Tasks to be Performed.

Task	Planned Start	Planned Finish
Work Item Creation	15/2/99	23/2/99
Work item Approval by TSG SA	1/3/99	5/3/99
Drafting and discussion	1/4/99	1/12/99
Submission to TSG SA for approval	1/12/99	30/12/99

Note: * These dates are a guess at present

Supporting Individual Members

All WG1 members

Rapporteur

SAMSUNG Electronics