

TSG-SA Working Group 1 (Services) meeting #1
Sophia Antipolis 1st - 5th February 1999

TSGS1#1(99)053

Agenda Item: 6.2.2

Source: SMG1

Title: UMTS 22.01, Service Principles version 3.3.0 - PowerPoint Presentation

Document for: Information, Discussion

UMTS 22.01, Service Principles version 3.3.0

Editor: Paul Dwyer, Vodafone.

SCOPE

- to support fixed-mobile integration, services to be provided via cellular, satellite, cordless/fixed
- to enable networks to differentiate themselves via their service offering
- to provide user bit rates of up to 2Mbit/s
- to support multimedia services

Caluse 4: General

- service capabilities rather than services will be standardised. This will enable service differentiation and ensure future development of UMTS
- the standard will enable terminals to roam between different networks, possibly using different radio interfaces
- UMTS will be IMT-2000 compliant
- UMTS will support the VHE

Functionality Entities

- Home Environment functions
 - User Authentication
 - Billing
 - USIM Issue
 - User Profile Management
- Serving Network functions
 - Access - radio or other means
 - Transport and signalling
- Shared functions
 - mobility management
 - roaming agreements
 - service control

Clause 5: Service Capabilities

- Multimedia services will be supported
 - Conversational
 - Messaging
 - Distribution
 - Retrieval
- Network management protocols shall:
 - support VHE
 - enable number portability
 - enable service creation and control
 - support one-stop billing
 - support QoS negotiation

Clause 6: Service Architecture

- A range of bearers will be provided, characterised by parameters such as bitrate, delay, symmetry
- Separation of transport, call control, mobility management
- Service execution environment in terminals and networks - supports VHE

Clause 7: QoS

- QoS issues are discussed in detail in TR22.25

Clause 8: Security

- The UICC shall be present in the terminal to make use of any service - with the exception of emergency calls
- Networks shall decide whether to accept emergency calls when no UICC is present
- The home environment shall be able to control all aspects of the user profile
- The user shall be able to authenticate the network
- User traffic shall be secured

Clause 9: Numbering

- UMTS shall support
 - number portability
 - optimal routing
 - multiple profiles
 - single numbering
 - evolution of the numbering plan
 - advanced addressing techniques (see UMTS 22.75)

Clause 10: Human Factors

- The MMI will not be standardised
- Different types of terminals will exist
- Activation of services should be simple
- Feedback to the user should be meaningful and easy to understand
- Error recovery procedures should be simple

Clause 11: IC-Card and USIM

- USIM shall have a unique identity
- USIM shall be an application on the UICC
- GSM physical formats shall be supported
- One or more profiles will be associated with each USIM
- A UICC may support more than one USIM (not for R'99)
- The UICC shall be capable of supporting other applications
- Multiple registration on a terminal via multiple UICCs shall be supported (not for R'99)

Clause 12: UPT

- This clause will be deleted

Clause 13: Service Environment

The following scenarios should be considered in the development of UMTS standards:

- use of UMTS to primarily provide wideband services (up to 2Mbps).
- use of UMTS to provide primarily telephony.
- use of UMTS for narrow (up to 64kbps) and wideband services.
- use of multi standard terminals to provide integrated services.

Clause 14: Evolution

- Pre-UMTS services will be supported
- Pre-UMTS users may roam onto UMTS networks and vice versa
- UMTS networks will support a core set of capabilities
- A mechanism for upgrading UMTS terminals shall be provided

Clause 15: Types of MS

- A variety of terminals with a range of capabilities should be provided
- Terminal interfaces should be identified to enable functionality split
- Terminals may be classified according to the capabilities they support rather than their physical characteristics

Clause 16: Charging Principles

- A variety of chargeable events shall be standardised
- Standardised format for transporting charging information is required
- Notification of chargeable events to the home environment to be near real time
- User should be able to determine charges before incurring them

Clause 17: Handover

- Seamless handover within same network
- Handover between UMTS networks owned by different operators (not R'99)
- Handover between UMTS and GSM for suitable services
- Handover between different environments e.g. indoor to outdoor

Proposed CRs - Shown in V3.5.0

- Clarify efficiency requirements in clause 4
- Add requirement to enable UMTS users to be identified by GSM identities e.g. IMSI
- Remove support for UPT
- Add UICC terminology and clarify phasing requirements for multiple USIMs
- Elaborate terminal requirements
- Add network selection requirements