3GPP/PCG#15 Meeting Sophia Antipolis, France 6 October 2005

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Source: Secretary

Title: Draft Contents of release 7

Agenda item: 5.1

Document for:

Decision	
Discussion	
Information	X

1 Introduction

This document provides the present status of the definition of the content of Release 7.

Last TSG SA (SA#29) proposes to consider stage 1 of Release 7 features' as stable, with some exceptions to be clarified by TSG SA#30 (Dec 05). The intention is then to have Stage 2 completed by March 2006 and Stage 3 by September 2006.

The specification of the features entirely supported within RAN and GERAN should be aligned to this calendar.

2 Release 7 features

7.68 Mcps TDD

3.84 Mcps TDD Enhanced Uplink

Multiple Input Multiple Output antennas (MIMO)

Release 7 RAN improvements: RAB support enhancement

Optimisation of DL channelisation code utilisation for 1.28 Mcps TDD

Delay optimisation for procedures applicable to CS and PS Connections

Rel-7 Improvements of the Radio Interface

It consists of:

- UMTS2600
- UMTS900
- UMTS2600 TDD Option
- UMTS1700
- UE Antenna Performance Evaluation Method and Requirements

Rel-7 Improvements of the Radio Interface

Improved support of IMS real time services using HSDPA/EDCH

Enhanced Performance Requirements based on Receive Diversity & LMMSE Equalizer Receiver for HSDPA UE

Improved support of IMS real time services using HSDPA/EDCH

- Enhancements for VoIP studied in RAN1
- RAB linking studied in RAN3

Enhanced Performance Requirements based on Receive Diversity & LMMSE Equalizer Receiver for HSDPA UE

Rel-7 IMS aspects

SA2 proposes not to create "IMS Phase 3" yet, therefore all IMS phase 2 functionalities not completed on time or new IMS functionalities are so far reported as stand-alone features in Release 7.

- IMS Stage-3 IETF Protocol Alignment:
- Mp (MRFC MRFP) interface protocol definitions
- IMS Support of Conferencing and Messaging Group Management:

Voice call continuity between CS and IMS (incl. I-WLAN)

Combinational Services

CS Video and Voice Service Improvements - other than Redial

PS domain and IMS impacts for supporting IMS Emergency calls

System enhancements for Fixed Broadband access to IMS (FBI)

LCS enhancements 3

Contains:

- · LCS for 3GPP Interworking WLAN
- Velocity
- LCS Enhancements Related to Location-Based Services
- · LCS/LBS Enhancements in GERAN
- Inclusion of Uplink TDOA Positioning method in the UTRAN specifications

Advanced Global Navigation Satellite System (A-GNSS) concept

Enhancements of VGCS in public networks for communication of public authority officials

Improvements of VGCS in public networks for parallel use of services

CAMEL Rel-7

It consists of:

Trunk Originated CAMEL Triggering

Generic User Profile phase 2

Rel-7 OSA Service Broker

OAM&P Rel-7

in full: Operation, Administration, Maintenance and Provisioning

It consists of:

- Performance Management
- Network Infrastructure Management
- Trace Management

GERAN Rel-7

It consists of:

- Support of Conversational Services in A/Gb mode via the PS domain
- MS Antenna Performance Evaluation Method and Requirements
- LCS/LBS Enhancements (see LCS3)
- Lower 700 MHz Inclusion in the GERAN Specifications (698 746 MHz band and 698 746 MHz band)
- Addition of new frequency band to GSM (T-GSM810)
- · Handover of dedicated and shared resources while in dual transfer mode

Rel-7 Codec aspects

It consists of:

- · Performance Characterization of VoIMS over HSDPA/EUL channels
- · Dynamic and interactive multimedia scenes
- Video Codec for PSS, MMS, PS Conversational and CS Multimedia (3G-324M), Performance requirements
- 3G-324M Video Telephony Call Setup Times Improvements

MBMS Enhancements

Evolution of Policy Control and Charging

Lawful Interception in the 3GPP Rel-7 architecture

Personal Network (PN) and Personal Area Network (PAN)

Multimedia Telephony Capabilities for IMS

Transferring of emergency Call data (eCall)

USSD message delivery and transfer to USIM

WLAN-UMTS Interworking Phase 2

Access Class Barring and Overload Protection

Identification of Communication Services in IMS

VolMS bearer related enhancements

Access Security Enhancements

Liberty Alliance and 3GPP Security Interworking

Trust Requirements for Open Platforms in 3GPP

Development of UEA2 and UIA2

DIAMETER on the PDG Wi inteface

DIAMETER on the GGSN Gi interface

WIs approved at TSG#29 (Release 7)

Several new WIs were presented at TSG#29. They are anticipated to belong to Release 7. This will be confirmed later on according to the progress of work on these items. Their classification as Features, Building Blocks or Work Tasks still has to be performed. These WIs are:

- FS on Machine to Machine communications (SA1)
- FS on Customised Ring Back Tone (CRBT) Requirements (SA1)
- FS on public warning system (SA1)
- Supporting Globally Routable User Agent URIs (GRUUs) in IMS (SA2)
- FS on IMS enhancements and optimisations for the support of mass market multimedia telephony
- WLAN Interworking Private Network access from WLAN 3GPP IP Access in (SA2)
- HTTPS connection between a UICC and a NAF (SA3)
- 2G GBA: 2G SIM usage in 3GPP GAA framework (SA3)
- Generic Authentication Architecture usage extensions and optimisations (SA3)
- Network Domain Security; SS7 security Gateway (NDS/TCAPsec) (SA3)
- Optimizations for Multimedia Telephony over IMS (SA4)
- Characterisation of Adaptive Jitter Management Performance for VoIP Services " (might become SI), BB under the above Feature (SA4)
- End-to-End Multimedia Services Performance Metrics" (might become SI) (SA4)
- Private Network access from WLAN 3GPP IP Access(CT1)

- Multimedia interworking between IM CN subsystem and circuit switched networks (CT3)
- Multimedia Resource Function Controller (MRFC) Multimedia Resource Function Processor (MRFP) Mp Interface (CT4)
- Study of a Short Message Service Centre for MT SMS (CT4)
- Continuous connectivity for packet data users (RAN)
- UMTS 2.6 GHz DL External (request from CEPT). PCG asked to decide on a GO/NO GO option for TSG RAN (RAN)
- Improved Performance Requirements for non-HSDPA channels based on Enhanced Receiver, Type 1 (Rx Diversity) (RAN)

Feasibility Studies:

The Feasibility Studies conduced in the Rel-7 time frame are:

- · Multi system mobile stations
- GERAN's Enhanced support of Video Telephony
- Future GERAN Evolution
- Study item on the performance evaluation of the UE behaviour in high speed trains with speeds up to 350 kmph (R4)
- · Continuous connectivity for packet data users
- SI UTRA FDD Tower Mounted Amplifier (TMA)
- System Architecture Evolution (FS)
- RAN's Long Term Evolution (LTE) / FS on Evolved UTRA and UTRAN (LTE)
- All-IP Network
- Mobility between heterogeneous Access Networks
- FS on IMS with real time services deployments
- FS on IMS services using CS bearers
- Support of SMS and MMS over IP networks
- Enhancement of E2E QoS
- Selective Disabling of UE Capabilities
- FS on Multimedia Priority Service Rel-7







