

Source: Secretary

Title: Frozen contents of Release 6

Agenda item: 6.1

Document for:

Decision	
Discussion	
Information	X

1 Introduction

This document provides the final status of the definition of the content of Release 6.

Release 6 content was frozen at last SA plenary meeting (SA#27) even if some features are not yet completed.

Section 2 lists all the Release 6 completed items, Section 3 lists the Release 6 items still not completed. For these ones, Submission Forms were provided to clearly indicate what are the tasks still open. They are all anticipated to be completed by next SA plenary.

Note that the Feasibility Studies are not listed in this document as they do not modify the concrete system.

2 Release 6 Completed features

Rel-6 improvements of Radio Interface

Includes:

- FDD Base Station Classification
- Improved receiver performance requirements for FDD UE
- Frequency bands: UMTS 850, UMTS 800, UMTS 1.7/2.1GHz.

Rel-6 RAN improvements

Includes:

- Beamforming Enhancements
- RRM optimization for Iur and Iub; Improved access to UE measurement data for CRNC to support TDD RRM
- Network Assisted Cell Change from UTRAN to GERAN – Network Side Aspects
- Remote Control of electrical antenna tilting
- HS-DPCCH ACK/NACK Enhancement
- RAB support enhancement: Optimisation of downlink channelisation code utilisation for FDD (R1). Introduction of Fractional DPCH (F-DPCH)

Rel-6 Improvements of Radio Interface

Includes:

- Improvements of receiver performance of HSDPA UE: Performance Requirements of Receive Diversity for HSDPA

IMS Phase 2

- Interworking between IMS and CS networks (Stage 3 in TS 29.163)
- interworking with non-IMS IP networks
- Lawful Interception
- IMS Group Management
- IP v4-based IMS
- Enhancements to Cx and Sh interfaces
- IMS Conferencing
- IMS Management
- IMS Charging
- IMS Messaging

IMSCOOP

Full name: "Interoperability and commonality between IMS using different IP connectivity networks"

Push Services**Speech Recognition and Speech Enabled Services**

3GPP Work completed, OMA's dependency on Multimodal support to be completed by December 2005 (was June).

Digital Rights Management (DRM)

Stages 2 and 3 covered by OMA work.

WLAN/UMTS interworking

Scenarios 1 to 3 (Scenario 4 and further in subsequent Releases)

Priority Service Rel-6

No Stage 2 and no stage 3 needed, It consists in a "Guide" to describe how existing 3GPP specifications support the high-level requirements

QoS Improvements

QoS Release 6 Improvements consist in Dynamic Policy Control Enhancements for End-to-End QoS.

Performance characterization of default codecs for PS conversational multimedia applications**UICC/USIM enhancements and interworking for Rel-6**

It contains:

- 2G/3G Java Card™ API based applet interworking: completed in TR 31.919
- USIM enhancements for WLAN Interworking.
- USSD message transfer to USIM:

Security Enhancements Rel-6

It contains:

- Network domain security
- Key Management of group keys for VGCS (Voice Group Call Services)
- GERAN A/Gb mode security enhancements :
- G-MILENAGE Algorithm
- BACKUP Algorithm work: Agreed funding. SA3's WID presented at SA#26

Generic Authentication Architecture (GAA)**GERAN Rel-6**

It contains:

- Addition of frequency bands to GSM
- Multiple TBF in A/Gb mode
- Seamless support of streaming services in A/Gb mode
- Flexible Layer One for GERAN
- Downlink Advanced Receiver Performance (DARP)
- MBMS just completed at GERAN#23 (see MBMS slide)

Network Sharing**Codec Enhancements for PS Conversational Multimedia Applications****CAMEL Rel-6**

It consists in "CAMEL prepay interworking with SCUDIF (Service Change UDI Fallback)"

LCS enhancements 2

It contains:

- Improvement on Le interface
- Enhanced support for anonymity and user privacy
- Enhanced inter-GMLC interface
- Location Services support for IMS public identities
- New area event for location service triggering reports

UE Positioning

Includes:

- Open interface between the SMLC and the SNR within the UTRAN to support Rel-4 positioning methods
- A-GPS minimum performance specification

3GPP Enablers for services like Push to Talk over Cellular (PoC)**OSA Improvements Rel-6****OAM&P Rel-6**

In full: Operation, Administration, Maintenance and Provisioning

Composed of four independent BBs:

- BB: Principles, high level Requirements & Architecture
- BB: Network Infrastructure Management
- BB: Performance Management
- BB: Subscriber and Equipment Trace
 - Contains Management Based Activation (MBA) and non-SIP Signalling Based Activation of Trace
 - CN1 and CN4 Rel-6, the non-SIP-based Trace is now completed

IP Flow Based Bearer Charging**Subscription Management (SuM)****ACBOP**

In full: 3GPP Access Class Barring and Overload Protection

3 List of items still not completed, but agreed to belong to Release 6**MMS Enhancements**

In full: Multimedia Messaging Service Enhancements

- Open points: some remaining audio codec specs are not yet completed (fixed-point C-code TS, conformance TS, characterisation TR)

Packet Switched Streaming Rel-6

- Remaining issue is audio codec

Presence

- Open Items related to audio codec specs

IMS Phase 2 (Incomplete Items)

- Additional SIP Capabilities support (CN1). , open issues related to procedures related to IMS-ALG (IMS Application Level Gateway).
- Profiling of the protocol to ensure interoperability in an open inter-vendor environment.
- Impacts of the requirements from TISPAN: only the ones which have some backward Rel-7 compatibility problems, in particular the Mn interface, (the other ones are for Release 7)

Multimedia Broadcast/Multicast Service (MBMS)

- Remaining issue on codec

Rel-6 RAN improvements

RAB support enhancement: Optimisation of the RABs for IMS voice over IP. A new ROHC parameter has to be included in the radio interface

Generic User Profile

Issues still open:

Dependencies on the Liberty Alliance Project, Formalised approach to GUP XML Schema derivation using a defined UML approach with a standardised translation mechanism.

Rel-6 Improvements of Radio Interface

- Improvements of receiver performance of HSDPA UE: Improved performance requirements for HSDPA categories 7 and 8

FDD Uplink Enhancements (EDCH)

Performance requirements to be completed in June 2005

CS Video and Voice Service Improvements - Redial Solution

Other solutions than Redial are for Release 7

- Still some CRs on TS 24.008 and 23.009 to be provided

Generic Access to A/Gb interface

Stage 3 (25% ready) supposed to be completed at TSG GERAN#24

Charging Management

TSG Approval target remains Jun 2005