## TSG-RAN Meeting #18 New Orleans, Louisiana, USA, 3 - 6 December 2002

Title Status Report

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Agenda Item 7.5

In the following a short summary of the main outcome of the last meeting of ITU-R WP8F (WP8F#9, Geneva, 25<sup>th</sup> September - 2<sup>nd</sup> October 2002) is provided, with specific reference to the result of the discussion on the contributions approved at the last TSG RAN Plenary (RP-020517 on Rec. M.1457, RP-020519 on Rec. IMT.1581, RP-020520 on Rec. M.1079). Also, an overview of the activities currently ongoing within ITU-R Ad Hoc is provided.

At the last meeting of ITU-R WP 8F, the new Recommendation on 'Vision, framework and overall objectives of the future development of IMT-2000 and systems beyond IMT-2000' was approved.

Also Revision 3 of Rec. ITU-R M.1457 ('Detailed specifications of the radio interfaces of International Mobile Telecommunications-2000 (IMT-2000)', also known as IMT.RSPC) was approved according to schedule. It encompasses the revised section 5.4 on IMT-2000 TDMA SC approved at the last meeting of 8F, and a revised section 5.2.2 on IMT-2000 CDMA MC; updated hyperlinks for sections 5.1.2 and 5.3.2 will be provided by SDO participating in 3GPP (as per RP-020517), whereas no changes were proposed for section 5.5 on IMT-2000 FDMA/TDMA - DECT. A reminder for the OPs participating in 3GPP on the remaining administrative issues to be addressed by 1<sup>st</sup> April 2003 is available in RP-020838.

With reference to Revision 4 of Rec. ITU-R M.1457, proposed changes to section 5.4 on IMT-2000 TDMA SC were received and they will be carried forward to the next meeting. A liaison statement was sent to External Organizations on Revision 4 of Recommendation ITU-R M.1457 (doc RP-020835). This liaison statement describes the deadlines of M.1457-4 and especially it clarifies the procedure defined in Circular Letter 8/LCCE/95 based on past experience. A proposed procedure elaborated within ITU-R Ad Hoc to be adopted within 3GPP in order to be compliant with the ITU deadlines is available in doc RP-020836. Also an updated roadmap was developed by 8F in order to collect relevant information for all radio interfaces in ITU-R M.1457. This is attached as Annex 1.

With reference to the Recommendation M.1079 on QoS ('Performance and Quality of Service requirements for IMT-2000 access networks'), Revision 2 was approved: the conclusion of the discussion on the input contribution from 3GPP side (RP-020520) on possible inconsistencies between TS22.105 and TS23.107 was to stick to TS22.105, avoiding any reference to material coming from TS23.107.

A Revision of Recommendation ITU-R M.1581 ('Generic unwanted emission characteristics of mobile stations using the terrestrial radio interfaces of IMT-2000')

was also approved by 8F in order to fix an inconsistency between the current Recommendations M.1581 and M.1457-2, as highlighted in RP-020519.

The Report on mitigation techniques to address coexistence between IMT-2000 TDD and FDD radio interface technologies within the frequency range 2500-2690MHz operating in adjacent bands and in the same geographical area was further developed. The current version of this new Report was sent to 3GPP and 3GPP2 (doc RP-020837) together with the current version of IMT-COEXT. *RAN4 is taking care of this contribution and a proposed response will be developed via ITU-R Ad Hoc for the next RAN Plenary*.

A Revision of Recommendation ITU-R M.1036 was also approved by 8F ('Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT-2000) in the bands 806-960 MHz, 1 710-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz').

Also the activity on the development of the Handbook on the deployment of IMT-2000 systems was almost completed. The Handbook is currently being reviewed by correspondence (deadline: 30 November 2002 for editing and to 15 December 2002 for the resolution of any pending issues).

The working document towards a preliminary draft new Report on Technology Trends will be carried forward for further development at the next WP 8F meeting (there will also be correspondence activity on this topic).

The text for a Circular Letter for "Request for administrations and Sector/Associate Members to contribute to the research on the future development of IMT-2000 and systems beyond IMT-2000" was also developed.

It was anticipated that at its next meeting, ITU-R WP 8F will be restructured: WG VIS will be discontinued since they have completed their mandate with the successful approval of Rec. IMT.VIS; it will be replaced by a new WG addressing future services/market aspects from the year 2010 onwards (under the chairmanship of Dr Wee from Korea). WG RTECH will be renamed WG TECH, always under the chairmanship of Ms. Cao (China). WG SPEC will be splitted in two groups: a WG on frequency arrangements/sharing issues under the chairmanship of Mr. Francisco Soares (Brazil), and a WG addressing WRC issues under the chairmanship of Ms. Christine Dilapi (US). Also a new group (Migration) was established in order to address some input on issues related to the evolution and migration of cellular (pre-IMT-2000) networks to IMT-2000.

### Annex 1

# ROADMAP FOR CURRENT WORK RELEVANT TO FUTURE UPDATES OF RECOMMENDATION ITU-R M.1457

#### 1 IMT-2000 CDMA-DS and IMT-2000 CDMA-TDD

The most updated and complete list of all technical areas currently addressed by 3GPP TSG RAN, together with a description of the current status of the activities, can be found on the 3GPP web site www.3gpp.org.

The list below contains the current foreseen content of 3GPP Rel6:

#### **Improvements of Radio Interface**

Will include:

- ? Multiple Input Multiple Output antennas (MIMO).
- ? FS for the viable deployment of UTRA in additional and diverse spectrum arrangements.

#### **RAN** improvements

Will include:

? Improvement of RRM across RNS and RNS/BSS.

#### **Security enhancements**

Will include:

? Enhanced HE control of security (including positive authentication reporting).

#### Multimedia Broadcast/Multicast Service (MBMS)

Network Sharing and/or Shared Network support in connected Mode

**Push Services** 

#### Wireless LAN/UMTS interworking

#### **MExE Enhancements Rel-6**

#### LCS enhancements 2

Will include:

- ? Interactions with 3GPP Generic User Profile.
- ? Enhanced User Privacy.
- ? GMLC GMLC interface (SA2).
- ? Support of the LCS/Presence interactions.

#### **IMS Phase 2**

will include:

- ? Identification portability (was number portability) in IMS.
- ? IMS local services.
- ? Specification of the interface at Sr.
- ? Radio optimization impacts on PS domain architecture.
- ? IMS Messaging.

- ? IMS Group management.
- ? IMS to PS interworking.
- ? Enhancements on IMS/CS interworking.

#### Generic User Profile

#### **Digital Rights Management**

## **Speech Recognition and Speech Enabled Services**

#### FS on Priority Service

#### **Rel-6 OSA enhancements**

## **Emergency call enhancements Rel-6**

Will include:

- ? Emergency calls from UEs without UICC/(U)SIM in Networks containing an IMS.
- ? Emergency call enhancements for IP & PS based calls with (U)SIM.

## **Support for Subscriber Certificates**

#### UICC/(U)SIM enhancements and interworking

will include "C SIM API".

## **Subscription Management**

#### **Trace Management**

#### Presence

#### **UE** functionality split

TR on Feasibility Study part of Rel-5, actual feature for Rel-6.

#### **QoS Improvements**

Will include "Dynamic Policy control enhancements for end-to-end QoS".

#### 2 **IMT-2000 CDMA-MC**

The following is an updated Roadmap for IMT-2000 CDMA MC. 3GPP2 is currently working on Revision D of CDMA2000. The following list of projects is being considered for inclusion into CDMA2000 Revision D and future releases.

1xEV-DV Capabilities Enhancements

3G Mobile Equipment Identifiers (MEID)

Access Control Based on Call Type

Access Control Based on Call Type (ACCT)

CDMA Card Application Toolkit (CCAT, in support of R-UIM)

CDMA2000 Reverse Link Enhancements

Common Security Algorithms

Data Services (technical updates)

End-to-End QoS

**Enhanced Call Recovery** 

Enhanced Message Service

**Enhanced OTASP Procedures** 

Enhanced Packet Data Air Interface Security

**Enhanced Security Services** 

Fast Call Set-Up

File and Media Format for Multimedia Services

Internet Over-the-Air Handset Configuration Management (IOTA)

IP Broadcast and IP Multicast

Link Layer Assisted Robust Header Compression (LLA ROHC)

Multimedia Message Service (MMS)

Multimedia Streaming

Prepaid Service Support for HRPD

Presence Service

**Priority Service** 

Realm Configured Packet Data Session Inactivity Timer

Rescue Channel

R-UIM to MS Interface Test Specification

SMS (primarily in support of EMS)

Subscribed Rate for Packet Data Services

Support for Common Channel Only Capable Devices

Video Conferencing Service

Wideband Speech Codec for cdma2000 Systems

Wireless Applications Management

### **3 IMT-2000 FDMA/TDMA**

The complete list of DECT work items can be found at the web site <a href="http://www.etsi.org/dect">http://www.etsi.org/dect</a>.

The main activity, which is relevant for WP 8F, is the:

Pupdate of the DECT multi-part Base Standard EN300175 to provide higher bit-rates (by adding optional modulation modes) and to improve the transmission quality (by adding forward error correction).

Other work items that may be relevant are the:

- ? New Technical Specification "DECT access to IP-networks".
- ? Update of the Technical Report ETR310 on DECT capacity (including simulation results).
- ? Update of the Technical Report TR101178 "High level guide to DECT Standardization".

#### 4 **IMT-2000 TDMA-SC**

Current activities aim to further harmonisation with the GSM EDGE Radio Access Network (GERAN). These enhancements, which allow for seamless global roaming between UWC-136 and GSM EDGE networks, as well as service transparency with CDMA-DS, include:

- ? Enhancements to the packet data service with the update to GERAN Release 5 material.
- ? Enhanced Mobile Equipment ID (MEID) for compatibility with GSM and other IMT-2000 technologies to facilitate global circulation.

This update provides additional convergence with ETSI EDGE and GERAN.