TSG RAN meeting# 26 **RP-040453**

Athens, Greece, 8th-10th of December 2004

Agenda Item: 8.12

Source: IPWireless

Title: WI proposal for UMTS 2600 MHz TDD Option

Document for: Approval

Work Item Description

Title: **UMTS 2.6 GHz, TDD**

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

UMTS 2.6GHz, FDD

3 Justification

Work within CEPT/PT1 regarding the ECC Decision on harmonised utilisation of spectrum for IMT-2000/UMTS systems operating within the band 2500 - 2690 MHz [Ref: 15th ECC PT1 MEETING, Draft ECC Decision on the harmonised utilisation of the band 2500 - 2690 MHz for IM T-2000/UMTS] has progressed to the extent that TSG RAN has sufficient information to commence work on specification for UMTS operating within the band 2500 - 2690 MHz.

The harmonised spectrum scheme for IMT-2000/UMTS in the band 2500 - 2690 MHz as considered by CEPT/PT1 in its current draft decision from the September PT1 meeting is as follows:

1. The frequency band 2500 – 2570 MHz is paired with 2620 – 2690 MHz for FDD operation with the mobile transmit within the lower band and base transmit within the upper band.
1. Administrations may assign the frequency band 2570 – 2620 MHz either for TDD or for FDD downlink (external). Any guard bands required to ensure adjacent band compatibility at 2570 MHz and 2620 MHz boundaries will be decided on a national basis and taken within the band 2570 – 2620 MHz.
2. Assigned blocks shall be in multiple of 5.0 MHz.

As all the necessary information related to the unpaired TDD operation in 2570 – 2620 MHz is available, TSG RAN should be able to start work on the relevant TDD specifications operating in this part of the 2.6 GHz band. This work must proceed in conjunction with the specifications being generated for the paired bands 2500 – 2570 MHz and 2620 – 2690 MHz for both (internal) FDD in order to give due consideration to the case where FDD and TDD technologies co-exist (when co-siting and in the same geographical area) in the 2.6GHz band.

4 Objective

The purpose of this work item is to generate necessary information for 2.6 GHz TDD system detailed below:

- Generate a report summarizing a study of radio requirements UTRA TDD in the 2.6 GHz Band
    - 2570 - 2620 MHz TDD
    - Co-existence requirements for TDD and FDD systems within 2500 – 2690 MHz
- Generate CR's to update the appropriate documents.
- TSG RAN WG2 - study any issues related to UMTS at 2.6 GHz TDD band-signalling aspects.
- TSG RAN WG3 - study any possible interface impacts to UMTS networks.
- Any additional related issues.

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

10 Expected Output and Time scale

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.102		UE Radio transmission and reception (TDD)	RAN#30 (Dec 2005)	
25.105		UTRA (BS) TDD; Radio transmission and reception	RAN#30 (Dec 2005)	
25.113		Base Station Electromagnetic compatibility	RAN#30 (Dec 2005)	
25.123		Requirements for Support of Radio Resource Management (TDD)	RAN#30 (Dec 2005)	
25.142		Base station conformance testing (TDD)	RAN#30 (Dec 2005)	
25.331		RRC Protocol	RAN#30 (Dec 2005)	
25.942		RF System Scenarios	RAN#30 (Dec 2005)	
25.306		Radio UE capability	RAN#30 (Dec 2005)	
25.307		Requirements on UEs supporting a Release Independent Frequency Band	RAN#30 (Dec 2005)	
34.122		Terminal Conformance Specification, Radio Transmission and Reception (TDD)	T# 30 (Dec 2005)	
34.124		ElectroMagnetic Compatibility (EMC) requirements for mobile terminals and anc illiary wquipment	T#30 (Dec 2005)	

11 Work item raporteurs

Shin Horng Wong (IPWireless)

12 Work item leadership

RAN WG 4

13 Supporting Companies

IPWireless, Siemens AG, CATT, Huawei, UTStarcom

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14b The WI is a Building Block:
This WI is a building block part of the radio interface improvement feature.