3GPP TSG-RAN Working Group 1, Meeting #11 TDoc TSG RAN WG1 (00)0223
San Diego, USA, February 29 – March 3, 2000

Source:	Siemens AG
Title:	Draft Proposal for Work Item Description 'NodeB Synchronisation via Air for TDD'
Agenda Item:	AdHoc 1

The following Work Item Description is proposed to be presented to TSG-RAN for approval.

Work Item Description

Title

NodeB Synchronisation via Air for UTRA TDD mode

1 SMG Work Area

X	UMTS Radio Access
	GSM Radio Access
	GSM-UMTS Core Network
	UMTS Services

2 Linked work items

none

3 Justification

The following benefits of the introduction of NodeB synchronistion via air are seen for the UTRAN:

- A substantial reduction of the cost of the transmission network.
- An autonomous synchronisation procedure without the need of external references.
- An easily extendable method for the purpose of inter-system NodeB synchronisation.

Objective

The purpose of this new work item is to enable the synchronisation of NodeBs in UTRA TDD by NodeB cross measurements on the air interface. NodeB synchronisation via the air interface involves radio frame und multi frame synchronisation.

The first step of the work will consist in providing the necessary changes to the generic specifications (TS 25.224, TS25.221, TS 25.402). Then, the CRs to the other specs concerning the supporting protocols, measurements, etc. will be provided.

4 Service Aspects

None

5 MMI-Aspects

None

6 Charging Aspects

None

7 Security Aspects

None

8 Impacts

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

9 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. STC	2ndary rsp. STC(s)	Presented for information at SMG#	Approved at SMG#	Comments
	None					

Affected existing specifications				
Spec No.	CR	Subject	Approved at SMG#	Comments
25.123		Requirements for Support of Radio Resource Management (TDD)	RAN #9	
25.221		Physical channels and mapping of transport channels onto physical channels (TDD)	RAN #9	
25.224		Physical Layer Procedures (TDD)	RAN #9	
25.225		Physical layer – Measurements (TDD)	RAN #9	
25.301		Radio Interface Protocol Architecture	RAN #9	
25.302		Services provided by the physical layer	RAN #9	
25.303		Interlayer procedures in connected mode	RAN #9	
25.321		MAC Protocol Specification	RAN #9	
25.331		RRC Protocol Specification	RAN #9	
25.402		Synchronisation in UTRAN Stage 2	RAN #9	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #9	
25.423		UTRAN Iur Interface RNSAP Signalling	RAN #9	

Work item raporteurs

(name of physical person)

Work item leadership

(one WG)

Supporting Companies

Siemens, Nokia