TSG-RAN Meeting No. 12 ***RP-010431***
Stockholm, Sweden, June 12-15, 2001

Source: Rapporteur

Title: Revised SI Sheet for SI "Mitigating the Effect of CPICH Interference at the UE"

Document for: Approval

At the previous RAN meeting (RAN # 11) the proposed Study Item "Mitigating the Effect of CPICH Interference at the UE" (RP-010260) was approved in principle, but there remained some question about the exact wording of the Study Item. RAN requested that WG4 revise the SI sheet, if necessary.

A revised wording of the Study Item was endorsed by RAN WG 4 at Meeting No. 17, and is shown below.

Study Item Description

Title:

Mitigating the Effect of CPICH Interference at the UE

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

Because the CPICH is typically allocated a significant portion of the total Node-B transmit power, the interference impact of the CPICH is particularly strong. On the other hand, the information content and structure of the CPICH channels are completely known a priori at the receiver, which can considerably simplify efforts to mitigate the CPICH interference effect. ~~Initial studies suggest that mitigating~~ Mitigating the effect of CPICH interference at the UE ~~can~~ may significantly improve UE performance requirements and increase radio network capacity~~, at a relatively small price in additional complexity~~.

4 Objective

The ~~initial~~ objectives of this study are the verification of the benefits of this feature through additional simulation studies, and further evaluation of complexity issues. Depending on the results of this ~~initial phase~~study, recommendations will be made as to whether to establish a 3GPP Work Item in order to incorporate this feature into the 3GPP standard. This would ultimately involve ~~the work may then proceed to~~ the establishment of appropriate test scenarios and procedures, as well as the derivation of improved UE performance requirements through physical layer simulations.

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			
No	X		X	X	
Don't know					

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

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
25.101		UE Radio transmission and reception (FDD)	RAN #13	
34.121		Terminal Conformance Specification, Radio Transmission and Reception	~~RAN #13~~T #13	

11 Work item raporteurs

Shimon Moshavi, Intel (Shimon.Moshavi@intel.com)

12 Work item leadership

TSG-RAN WG4

13 Supporting Companies

Cingular, T-Mobil, Telecom Italia, AWS, Omnitel/Vodafone, Lucent, Intel

14 Classification of the WI (if known)

~~X~~	Feature (go to 14a)
X	Building Block (go to 14b)

	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature
(list of Work Items identified as building blocks)
14b The WI is a Building Block: parent Feature
Improvements of Radio Interface
~~(one Work Item identified as a feature)~~
14c The WI is a Work Task: parent Building Block
(one Work Item identified as a building block)