TSG-RAN Meeting #12 *RP-010358*
Stockholm, Sweden, 12 - 15 June 2001

Title: **Agreed CR (Release 4) to TS 25.101**

Source: **TSG-RAN WG4**

Agenda item: **8.4.4**

WG4 doc	Status WG4	Spec	CR	Phase	Title	Cat	V old	V new
R4-010593	agreed	25.101	117	Rel-4	Correction of AICH performance	F	4.0.0	4.1.0

3GPP TSG RAN WG4 Meeting #17 **R4-010593**

Gothenburg, Sweden 21st - 25th May 2001

CR-Form-v4

CHANGE REQUEST

⌘ **25.101** **CR** **117** ⌘ ev **-** ⌘ Current version: **4.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☐

Title:	⌘	Correction of AICH performance
Source:	⌘	RAN WG4
Work item code:	⌘	TEI4
Date:	⌘	2001-05-15
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
- ***F*** *(correction)*
- ***A*** *(corresponds to a correction in an earlier release)*
- ***B*** *(addition of feature),*
- ***C*** *(functional modification of feature)*
- ***D*** *(editorial modification)*

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
REL-4	*(Release 4)*
REL-5	*(Release 5)*

Reason for change:	⌘	When evaluating the performance, there were errors in the simulation results. The resulting error performance was better than the theoretical performance.
Summary of change:	⌘	Change the AICH power offset in the testcase
Consequences if not approved:	⌘	Much less implementation margin than agreed is allowed.

Clauses affected:	⌘	8.13.1
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.13 Detection of Acquisition Indicator (AI)

The receiver characteristics of Acquisition Indicator (AI) are determined by the probability of false alarm Pfa and probability of correct detection Pd. Pfa is defined as a conditional probability of detection of AI signature given that a AI signature was not transmitted. Pd is defined as a conditional probability of correct detection of AI signature given that the AI signature is transmitted.

8.13.1 Minimum requirement

For the parameters specified in Table8.44 the Pfa and 1-Pd shall not the exceed the specified values in Table 8.45. Power of downlink channels other than AICH is as defined in Table C.3 of Annex C.

Table 8.44: Parameters for AI detection

Parameter	Unit	Test 1
Phase reference	-	P-CPICH
I_{oc}	dBm/3.84 MHz	-60
Number of other transmitted AI signatures on AICH	-	0
$\hat{I}_{or}/I_{oc}$	dB	-1
AICH_Ec/Ior	dB	-223.0
AICH Power Offset	dB	-123.0
Propagation condition	-	Static

Note that AICH_Ec/Ior can not be set. Its value is calculated from other parameters and it is given for information only. (AICH_Ec/Ior = AICH Power Offset + CPICH_Ec/Ior)

Table 8.45: Test requirements for AI detection

Test Number	Pfa	1-Pd
1	0.01	0.01