

**TSG RAN Meeting #14**

**RP-010780**

**Kyoto, Japan, 11 - 14 December 2001**

**Title: CRs (R'99 and Rel-4 Category A) to TS 25.105**

**Source: TSG RAN WG4**

**Agenda Item: 8.4.3**

<b>RAN4 Tdoc</b>	<b>Spec</b>	<b>CR</b>	<b>Title</b>	<b>Cat</b>	<b>Phase</b>	<b>Curr Ver</b>	<b>New Ver</b>
R4-011449	25.105	86	Table label correction from BLER Required Eb/No to BLER	F	Rel99	3.8.0	3.9.0
R4-011495	25.105	87	Table label correction from BLER Required Eb/No to BLER	A	Rel-4	4.2.0	4.3.0

## CHANGE REQUEST

⌘ 25.105 CR 86 ⌘ ev - ⌘ Current version: 3.8.0 ⌘

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

<b>Title:</b>	⌘ Table label correction from BLER Required Eb/No to BLER
<b>Source:</b>	⌘ RAN WG4
<b>Work item code:</b>	⌘ <input type="text"/>
<b>Date:</b>	⌘ 12 Nov. 2001
<b>Category:</b>	⌘ <b>F</b>
	<p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (addition of feature),  <b>C</b> (functional modification of feature)  <b>D</b> (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a>.</p>
<b>Release:</b>	⌘ Rel99
	<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)  R96 (Release 1996)  R97 (Release 1997)  R98 (Release 1998)  R99 (Release 1999)  REL-4 (Release 4)  REL-5 (Release 5)</p>

<b>Reason for change:</b>	⌘ Existing table label is incorrect and need to be corrected.
<b>Summary of change:</b>	⌘ Correct table label from: BLER Required $E_b/N_{0,10}$ BLER
<b>Consequences if not approved:</b>	⌘ Incorrect table label will cause specification confusion.
	<p>Isolated Impact Analysis:  Correction to a function where the specification was:</p> <ul style="list-style-type: none"> <li>Containing some Contradictions</li> </ul> <p>Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.</p>

<b>Clauses affected:</b>	⌘ 8.2.1.1
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="text"/> <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘ <input type="text"/>

**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](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.

8.2.1.1 Minimum requirement

For the parameters specified in Table 8.2 the BLER should not exceed the piece-wise linear BLER curve specified in Table 8.3. These requirements are applicable for TFCS size 16.

**Table 8.2: Parameters in static propagation conditions**

Parameters	Unit	Test 1	Test 2	Test 3	Test 4
Number of DPCH <sub>o</sub>		6	4	0	0
$\frac{DPCH_o - E_c}{I_{or}}$	dB	-9	-9.5	0	0
$I_{oc}$	dBm/3.84 MHz	-89			
Cell Parameter*		0,1			
DPCH Channelization Codes*	C(k,Q)	C(1,8)	C(1,4) C(5,16)	C(1,2) C(9,16)	C(1,2)
DPCH <sub>o</sub> Channelization Codes*	C(k,Q)	C(i,16) 3 ≤ i ≤ 8	C(i,16) 6 ≤ i ≤ 9	-	-
Information Data Rate	kbps	12.2	64	144	384
*Note: Refer to TS 25.223 for definition of channelization codes and cell parameter.					

**Table 8.3: Performance requirements in AWGN channel.**

Test Number	$\frac{\hat{I}_{or}}{I_{oc}}$ [dB]	BLER Required $E_b/N_0$
1	-2.0	$10^{-2}$
2	-0.4	$10^{-1}$
	-0.1	$10^{-2}$
3	-0.2	$10^{-1}$
	0.1	$10^{-2}$
4	-0.8	$10^{-1}$
	-0.6	$10^{-2}$

**CHANGE REQUEST**

⌘ **25.105 CR 87** ⌘ ev **-** ⌘ Current version: **4.2.0** ⌘

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

<b>Title:</b>	⌘ Table label correction from BLER Required Eb/No to BLER
<b>Source:</b>	⌘ RAN WG4
<b>Work item code:</b>	⌘ <input type="text"/>
<b>Date:</b>	⌘ 13 Nov. 2001
<b>Category:</b>	⌘ <b>A</b>
	<p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (addition of feature),  <b>C</b> (functional modification of feature)  <b>D</b> (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP <a href="#">IR 21.900</a>.</p>
<b>Release:</b>	⌘ Rel-4
	<p>Use <u>one</u> of the following releases:</p> <p><b>2</b> (GSM Phase 2)  <b>R96</b> (Release 1996)  <b>R97</b> (Release 1997)  <b>R98</b> (Release 1998)  <b>R99</b> (Release 1999)  <b>REL-4</b> (Release 4)  <b>REL-5</b> (Release 5)</p>

<b>Reason for change:</b>	⌘ Existing table labels are incorrect and need to be corrected.
<b>Summary of change:</b>	⌘ Correct table labels from: BLER Required $E_b/N_0$ to BLER
<b>Consequences if not approved:</b>	⌘ Incorrect table labels will cause specification confusion.
	<p>Isolated Impact Analysis:  Correction to a function where the specification was:</p> <ul style="list-style-type: none"> <li>Containing some Contradictions</li> </ul> <p>Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.</p>

<b>Clauses affected:</b>	⌘ 8.2.1.1
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="text"/> <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘ <input type="text"/>

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- 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.

8.2.1.1 Minimum requirement

8.2.1.1.1 3,84 Mcps TDD Option

For the parameters specified in Table 8.2 the BLER should not exceed the piece-wise linear BLER curve specified in Table 8.3. These requirements are applicable for TFCS size 16.

**Table 8.2: Parameters in static propagation conditions**

Parameters	Unit	Test 1	Test 2	Test 3	Test 4
Number of DPCH <sub>o</sub>		6	4	0	0
$\frac{DPCH_o - E_c}{I_{or}}$	dB	-9	-9.5	0	0
$I_{oc}$	dBm/3.84 MHz	-89			
Cell Parameter*		0,1			
DPCH Channelization Codes*	C(k,Q)	C(1,8)	C(1,4) C(5,16)	C(1,2) C(9,16)	C(1,2)
DPCH <sub>o</sub> Channelization Codes*	C(k,Q)	C(i,16) 3 ≤ i ≤ 8	C(i,16) 6 ≤ i ≤ 9	-	-
Information Data Rate	kbps	12.2	64	144	384

\*Note: Refer to TS 25.223 for definition of channelization codes and cell parameter.

**Table 8.3: Performance requirements in AWGN channel.**

Test Number	$\frac{\hat{I}_{or}}{I_{oc}}$ [dB]	BLER Required $\frac{E_b}{N_0}$
1	-2.0	$10^{-2}$
2	-0.4	$10^{-1}$
	-0.1	$10^{-2}$
3	-0.2	$10^{-1}$
	0.1	$10^{-2}$
4	-0.8	$10^{-1}$
	-0.6	$10^{-2}$

8.2.1.1.2 1,28 Mcps TDD Option

For the parameters specified in Table8.2A the BLER should not exceed the piece-wise linear BLER curve specified in Table8.3A. These requirements are applicable for TFCS size 16.

**Table 8.2A: Parameters in static propagation conditions**

Parameters	Unit	Test 1	Test 2	Test 3	Test 4
Number of DPCH <sub>o</sub>		4	1	1	0
Spread factor of DPCH <sub>o</sub>		8	8	8	-
$\frac{DPCH_o - E_c}{I_{or}}$	dB	-7	-7	-7	0
$I_{oc}$	dBm/1.28MHz	-91			
Information Data Rate	Kbps	12.2	64	144	384

Table 8.3A: Performance requirements in AWGN channel.

Test Number	$\frac{\hat{I}_{or}}{I_{oc}}$ [dB]	BLER Required $E_b/N_0$
1	0.5	$10^{-2}$
2	-1.1	$10^{-1}$
	-0.7	$10^{-2}$
3	-0.5	$10^{-1}$
	-0.3	$10^{-2}$
4	0.1	$10^{-1}$
	0.4	$10^{-2}$