TSG RAN Meeting #22 **RP-030696**
Maui, USA, 9 - 12 December 2003

Title **CRs (Rel-5 only) to TS 25.423 and TS 25.433 on Modification of the dynamic range of the PCCPCH Power**
Source **TSG RAN WG3**
Agenda Item **7.4.6**

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-031494	25.423	5.7.0	5.8.0	REL-5	872	-	F	Modification of the dynamic range of the PCCPCH Power	TEI5
R3-031495	25.433	5.6.0	5.7.0	REL-5	906	-	F	Modification of the dynamic range of the PCCPCH Power, DwPCH Power and Max FPACH Power	TEI5

Note: These CRs were 'conditionally agreed' at RAN3 #39 under the condition that "there will be no conflicting changes in RAN2".
The change of the upper limit of the DwPCH, Max FPACH and PCCPCH power range to 43dBm as addressed in these CRs is in line with RAN2 specifications.
No CR is provided to modify this upper limit in RAN2. Discussions about corresponding later alignment of the lower limit are ongoing.

3GPP TSG-RAN WG3 Meeting #39
San Diego, USA, November 17th – 21st, 2003

Tdoc ⌘R3-031494

CR-Form-v7

CHANGE REQUEST

⌘ **25.423** **CR** **872** ⌘ **rev** **-** ⌘ Current version: **5.7.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Modification of the dynamic range of the PCCPCH Power
Source:	⌘	RAN3
Work item code:	⌘	TEI5
Date:	⌘	03/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

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)
Rel-6 (Release 6)

Reason for change:	⌘	In current specifications, there are different ranges of PCCPCH Power in RRC spec in RAN2 and NBAP, RNSAP spec in RAN3. This would cause some problems for this variance. To solve this problem, the maximum range of the PCCPCH power needs to be changed from 40dBm to 43dBm to be aligned with the definition in RRC.
Summary of change:	⌘	Change the range of PCCPCH Power from (-15..40)dBm to (-15..43)dBm. Corresponding changes have been made in ASN.1 Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the maximum limit of PCCPCH Power.
Consequences if not approved:	⌘	If this CR is not approved, the range of PCCPCH Power would be some ambiguity.

Clauses affected:	⌘	9.2.1.43, 9.3.4

Other specs affected:	Y	N			
⌘	X		Other core specifications	⌘	TS25.433 CR906
		X	Test specifications		
		X	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/specs/CR.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.

9.2.1.43 PCCPCH Power

Primary CCPCH power is the power that shall be used for reference power value in a TDD cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the PCCPCH Power is the linear sum of the power that is used for transmitting the PCCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			NTEGER (-150..400,...,401..430)	Value=PCCPCH Power/10 Unit dBm Range –15.0 to 430.0 dBm, Step size 0.1 dB. -15.0 shall indicate P≤ -15dBm +430.0 shall indicate P≥ 430dBm.

9.3.4 Information Element Definitions

```
-- **************************************************************
--
-- Information Element Definitions
--
-- **************************************************************

RNSAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxCodeNumComp-1,
    maxNrOfFACHs,
    maxFACHCountPlus1,
    maxIBSEG,
/* partly omitted */

PCCPCH-Power ::= INTEGER (-150..400,...,401..430)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH-Power shall be set to -150
-- If power >= 430 PCCPCH-Power shall be set to 4300
-- Unit dBm, Range -15dBm .. +430 dBm, Step 0.1dBm

PCH-InformationList ::= SEQUENCE (SIZE(0..1)) OF PCH-InformationItem

PCH-InformationItem ::= SEQUENCE {
    transportFormatSet              TransportFormatSet,
    iE-Extensions                   ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

/* partly omitted */
```

3GPP TSG-RAN WG3 Meeting #39
San Diego, USA, November 17th – 21st, 2003

Tdoc ⌘R3-031495

CR-Form-v7

CHANGE REQUEST

⌘ **25.433** **CR** **906** ⌘ **rev** **-** ⌘ Current version: **5.6.0** ⌘

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

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Modification of the dynamic range of the PCCPCH Power, DwPCH Power and Max FPACH Power
Source:	⌘	RAN3
Work item code:	⌘	TEI5
Date:	⌘	03/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
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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)*
Rel-6 *(Release 6)*

Reason for change:	⌘	In current specifications, there are different ranges of PCCPCH Power in RRC spec in RAN2 and NBAP, RNSAP spec in RAN3. This would cause some problems for this variance. To solve this problem, the maximum range of the PCCPCH power needs to be changed from 40dBm to 43dBm to be aligned with the definition in RRC. For 1.28Mcps TDD, the DwPCH Power and Max FPACH Power also have the same range of the PCCPCH Power.
Summary of change:	⌘	Change the range of PCCPCH Power, DwPCH Power and Max FPACH Power from (-15..40)dBm to (-15..43)dBm. Corresponding changes have been made in ASN.1 Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the maximum limit of PCCPCH Power, DwPCH Power and Max FPACH Power.
Consequences if not approved:	⌘	If this CR is not approved, the range of PCCPCH Power, DwPCH Power and Max FPACH Power would be some ambiguity.

Clauses affected:	⌘	9.2.3.5B, 9.2.3.5E,9.2.3.9, 9.3.4				
Other specs	⌘	Y: X	N:	Other core specifications	⌘	TS25.423 CR872

affected:	X	Test specifications
	X	O&M Specifications
Other comments: ⌘		

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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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.

9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the DwPCH, the DwPCH power is the linear sum of the power that is used for transmitting the DwPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DwPCH Power			INTEGER (-150..+400,…,+401..+430)	Value = DwPCH Power /10 Unit: dBm Range: -15 ..+43~~0~~ dBm Step: 0.1 dB

9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the FPACH, the Max FPACH Power is maximum of the linear sum of the power that is allowed for transmitting the FPACH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FPACH Power			INTEGER (-150..+400,…,+401..+430)	Value = FPACH Power /10 Unit: dBm Range: -15 ..+43~~0~~ dBm Step: 0.1 dB

9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P CCPCH in a cell. The P CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the Primary CCPCH power is the linear sum of the power that is used for transmitting the Primary CCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER (-150..+400,…,+401..+430)	Value = PCCPCH Power /10 Unit: dBm Range: -15 ..+43~~0~~ dBm Step: 0.1 dB

9.3.4 Information Elements Definitions

```
--**************************************************************************
--
-- Information Element Definitions
--
--**************************************************************************

NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

/* partly omitted */
DwPCH-Power ::= INTEGER (-150..400,...,401..430)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH-Power shall be set to -150
-- If power >= 430 DwPCH-Power shall be set to 4300
-- Unit dBm, Range -15dBm .. +430 dBm, Step +0.1dB

/* partly omitted */
FPACH-Power ::= INTEGER (-150..400,...,401..430) -- FPACH-power = power * 10
-- If power <= -15 FPACH-Power shall be set to -150
-- If power >= 430 FPACH-Power shall be set to 4300
-- Unit dBm, Range -15dBm .. +430 dBm, Step +0.1dB

/* partly omitted */
PCCPCH-Power ::= INTEGER (-150..400,...,401..430)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH-Power shall be set to -150
-- If power >= 430 PCCPCH-Power shall be set to 4300
-- Unit dBm, Range -15dBm .. +430 dBm, Step +0.1dB
```