

**TSG RAN Meeting #25
Palm Springs, USA, 07 - 09 September 2004**

RP-040362

Title CR to TS 25.433 on Clarification on the FPACH configuration for 1.28Mcps TDD
Source Siemens, CATT/CCSA
Agenda Item 7.4.5

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	CR	Rev	Cat	Rel	Title	Work item
	25.433	4.12.0	4.13.0	1037	-	F	Rel-4	Clarification on the FPACH configuration for 1.28Mcps TDD	TEI4

Note:

In last RAN3#43 meeting, CATT submitted two CRs (CR1031 CR1032) about the clarification on the FPACH configuration for 1.28Mcps TDD. In RAN3, the CRs (RP-040324) are agreed from REL-5 specification onward. But in RAN1 and RAN2, the corresponding CRs (RP-040319) are agreed from REL-4 onward.

In order to keep the consistency for all groups, Siemens and CATT prefer to submit the attached REL-4 NBAP CR in this plenary meeting.

Reference:

[1] RP-040324 "CRs (Rel-5 and Rel-6 Category A) to TS 25.433 on Clarification on the FPACH configuration for 1.28Mcps TDD", 3GPP RAN 25, Palm Springs, USA, 07 - 09 September 2004, TSG RAN WG3

[2] RP-040319 "Linked CRs (Rel-4 and Rel-5/Rel-6 Category A) to TS25.224 & TS25.331 for corrections of radio access procedure for 1.28Mcps TDD", 3GPP RAN 25, Palm Springs, USA, 07 - 09 September 2004, TSG RAN WG1

CR-Formv7

CHANGE REQUEST

25.433 CR 1037 rev - Current version: **4.12.0**

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:	Clarification on the FPACH configuration for 1.28Mcps TDD		
Source:	Siemens, CATT/CCSA		
Work item code:	TEI4	Date:	01/09/2004
Category:	F	Release:	Rel-4
	Use <u>one</u> 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 <u>one</u> 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 RAN1 and RAN2, multiple FPACHs are supported, and the relationship of SYNC_UL, FPACH and PRACH is indicated. But in current NBAP spec, the relationship of SYNC_UL, FPACH and PRACH is not defined. So there would meet some problems when multiple FPACHs are used.
Summary of change:	Introduce the relationship of SYNC_UL, FPACH and PRACH when more than one FPACH is defined. 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 usage of FPACH.
Consequences if not approved:	If this CR is not approved, there would cause the confusion when multiple FPACHs are used.

Clauses affected:	8.2.1.2						
Other specs	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> </table> Other core specifications	Y	N	X			TS25.433 REL-5 CR1031 TS25.433 REL-6 CR1032 TS25.224 REL-4 CR135r1 TS25.224 REL-5 CR136r1 TS25.224 REL-6 CR137r1 TS25.331 REL-4 CR2382 TS25.331 REL-5 CR2383 TS25.331 REL-6 CR2384
Y	N						
X							

affected:

<input checked="" type="checkbox"/>	Test specifications
<input checked="" type="checkbox"/>	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.

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH [FDD], AICH [FDD], AP_AICH [FDD], CD/CA-ICH [FDD], FACH, PCH, RACH, FPACH[1.28Mcps TDD] and CPCH [FDD].

8.2.1.2 Successful Operation

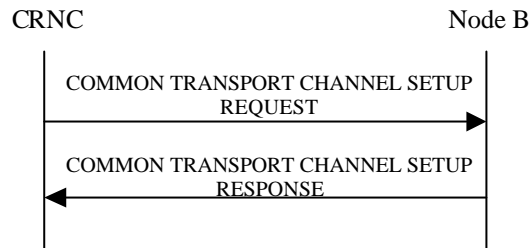


Figure 1: Common Transport Channel Setup procedure, Successful Operation

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

One message can configure only one of the following combinations:

- [FDD - one Secondary CCPCH, and FACHs, PCH and PICH related to that Secondary CCPCH], or
- [TDD - one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH related to that group of Secondary CCPCHs], or
- one [1.28Mcps TDD – or more] PRACH, one RACH and one AICH [FDD] and one FPACH[1.28Mcps TDD] related to that PRACH.
- [FDD-PCPCHs, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHs.]

Secondary CCPCH:

[FDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, the Node B shall configure and activate the indicated Secondary CCPCH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *Secondary CCPCH* IE, the Node B shall configure and activate the indicated Secondary CCPCH(s) according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

[TDD - FACHs and PCH may be mapped onto a CCTrCH which may consist of several Secondary CCPCHs]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *FACH Parameters* IE, the Node B shall configure and activate the indicated FACH(s) according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *PCH Parameters* IE, the Node B shall configure and activate the concerned PCH and the associated PICH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD – If the *PCH Power* IE is included in the *PCH Parameters* IE of the COMMON TRANSPORT CHANNEL SETUP REQUEST, the Node B shall use this value as the power at which the PCH shall be transmitted.]

PRACH:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *PRACH* IE, the Node B shall configure and activate the indicated PRACH and the associated RACH [FDD – and the associated AICH] according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mc ps TDD – FPACH]:

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *FPACH* IE, the Node B shall configure and activate the indicated FPACH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

Where more than one FPACH is defined, the FPACH that Node B should use is defined by the UpPCH signature (SYNC UL) code that the UE used. The FPACH number = $N \bmod M$ where N denotes the signature number (0..7) and M denotes the number of FPACHs that are defined in a cell. The FPACH number is in ascending order by *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD-PCPCHs]:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CPCH Parameters* IE, the Node B shall configure and activate the indicated CPCH and the associated PCPCH(s), AP-AICH and CD/CA-ICH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Signatures* IE, the Node B may use only the given CD signatures on CD/CA-ICH. Otherwise, the Node B may use all the CD signatures on CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Sub Channel Numbers* IE, the Node B may use only the given CD Sub Channels on CD/CA-ICH. Otherwise, the Node B may use all the CD Sub Channels on CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *Channel Request Parameters* IE, the Node B shall use the parameters to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *Channel Request Parameters* IE, the Node B shall use only these AP sub channel number to distinguish the configured PCPCH. Otherwise all AP subchannel numbers are used to distinguish the configured PCPCH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *SF Request Parameters* IE, the Node B shall use only these AP sub channel number to distinguish the requested Spreading Factors. Otherwise all AP subchannel numbers are used to distinguish the configured Spreading Factor.

General:

After successfully configuring the requested common transport channels and the common physical channels, the Node B shall store the value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID* IE, the *Binding ID* IE and the *Transport Layer Address* IE for the configured common transport channels.

After a successful procedure and once the transport bearers are established, the configured common transport channels and the common physical channels shall adopt the state Enabled [6] in the Node B and the common physical channels exist on the Uu interface.