Title:	**LS on New RAN TR collecting example RABs**
Release:	**R'99**
To:	**TSG T**
Source:	**TSG RAN**
Contact Person:	**Per Beming** **per.beming@era.ericsson.se**
Attachments:	**R2-021902 CR to 34.108 on Addition of alternative configuration using Turbo Coding for Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH**

Overall description

At its 17th meeting TSG RAN received an LS from TSG RAN WG2 asking for clarification of the scope of 34.108. TSG RAN WG2 had identified that the document is used in two somewhat conflicting ways:
1) Used for creating test cases that covers the core specifications
2) Used in commercial and IOT discussions

The conflict comes from the wish of stabilizing the test specifications and only include RABs that increase the test coverage whereas IOT and commercial discussions are ongoing and new RABs are proposed all the time that do not increase the test coverage.

TSG RAN agreed that the correct scope should be on test coverage and not IOT. However, TSG RAN understands the relevance of capturing good examples of how to use the radio interface. Therefore, TSG RAN decided to create a technical report where good examples of RABs, not necessary for testing, will be captured.

The scope of the TR will be:
The present document provides a list of examples of RABs and RAB combinations, which are supported by UTRA with examples of radio interface mapping for these RABs onto Radio Bearers and Signalling Radio Bearers.

This list of examples describes typical parameters, and should only be understood as possible configurations i.e. any other configuration supported by the Core Specifications and consistent with a given UE capability shall also be supported by this UE.

The present document addresses the FDD mode as well as the TDD mode.

This report is a release independent report. Actual release where a given example applies is indicated in the relevant section.

This new TR is expected to be used from R'99 and onwards.

Actions for TSG T

1. TSG RAN would welcome any comments from TSG T on the approach with 34.108 and the TR.
2. TSG RAN has identified that one of the RABs in the LS from TSG RAN WG2 increase the test coverage. The detailed contribution on the RAB is attached, and TSG T is kindly asked to include the RAB in 34.108.

Date of next RAN meetings

3GPPRAN-#18   3 - 6 Dec 2002   New Orleans   US
3GPPRAN-#19   11 - 14 Mar 2003   Jersey Island   UK

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **34.108** CR **CRNum** | ⌘**rev** | **-** | ⌘ | 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 **X**   Radio Access Network ☐   Core Network ☐

Title:	⌘	Addition of alternative configuration using Turbo Coding for Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
Source:	⌘	Nortel Networks

Work item code: ⌘	TEI		***Date:*** ⌘	2002-08-21

Category:	⌘	**F**		***Release:*** ⌘	R99

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 <u>TR 21.900</u>.

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)*

Reason for change:	⌘	For all the existing RAB combinations containing an 8 kbps PS RAB, the transport channel configuration of the 8kbps PS RAB is using either Turbo Coding or alternatively Convolutional Code (only in some cases). The only exception is the combination Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH for which the coding for the 8/8 kbps PS RAB is CC only. It is considered that the test coverage of this combination is incomplete without the TC alternative.
Summary of change: ⌘		The Turbo Coding is added as an alternative of the 8/8 PS RAB transport channel coding in the combination Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH. There is no impact on any other RAB combination.
Consequences if not approved:	⌘	Incomplete test coverage of the combination Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

Clauses affected:	⌘	6.10.2.4.1.23a

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/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.

<Start of modified section>

6.10.2.4.1.23a   Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23a.1   Uplink

6.10.2.4.1.23a.1.1   Transport channel parameters

6.10.2.4.1.23a.1.1.1   Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

Higher Layer	RAB/Signalling RB		**RAB**
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3 (alt. TC)
	CRC, bit		16
	Max number of bits/TTI after channel coding		1080 (alt. 1068)
	Uplink: Max number of bits/radio frame before rate matching		270 (alt. 267)
	RM attribute		135-175

6.10.2.4.1.23a.1.1.2   Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23a.1.1.3   TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.23a.1.2   Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	1.0

6.10.2.4.1.23a.2 Downlink

6.10.2.4.1.23a.2.1 Transport channel parameters

6.10.2.4.1.23a.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		**RAB**
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3 <u>(alt. TC)</u>
	CRC, bit		16
	Max number of bits/TTI after channel coding		1080 <u>(alt. 1068)</u>
	RM attribute		135-175

6.10.2.4.1.23a.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23a.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.23a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

<End of modified section>