TSGRP#12(01) 0382

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

Title: Agreed CRs to TS 25.430

Source: TSG-RAN WG3

Agenda item: 8.3.3/8.3.4

Tdoc_Num	Specification	CR_Num	Revision_Num	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Num	Workitem
R3-011364	25.430	018		Clarification of Common Channel logical model	F	agreed	3.5.0	3.6.0	TEI
R3-011365	25.430	019		Clarification of Common Channel logical model	A	agreed	4.0.0	4.1.0	TEI
R3-011483	25.430	020		Traffic Management in Common Channels	F	agreed	3.5.0	3.6.0	TEI
R3-011484	25.430	021		Traffic Management in Common Channels	A	agreed	4.0.0	4.1.0	TEI
R3-011508	25.430	022		Alignment of Cell description to NBAP	F	agreed	3.5.0	3.6.0	TEI
R3-011509	25.430	023		Alignment of Cell description to NBAP	A	agreed	4.0.0	4.1.0	TEI

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			CH	ANGE	ERE	EQI	JEST					
ж	25	.430	CR 18		ж ı	rev	ж	Current	versio	on:	3.5.0	ж
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the # symbols.												
Proposed change	affec	<i>ts:</i>	(U)SIM	ME	E/UE		Radio A	ccess Net	twork	X	Core Ne	etwork
<i>Title:</i> ೫	Cla	rificatio	on of Comi	mon Char	nnel lo	gical	model					
Source: अ	R-\	VG3										
Work item code: ೫	TE	l						Date	e: ೫	May	2001	
Category: ೫	F							Release	e: ೫	R99		
	Use Deta be fo	one of the formation of	he following ential correc esponds to ition of feat ctional mod orial modifi lanations o 3GPP TR 2	g categorie ction) a correctio ure), dification of cation) f the above 1.900.	es: on in al f featur e categ	n earl re) gories	ier releas can	Use <u>or</u> 2 re) R96 R97 R98 R99 REL REL	<u>ne</u> of th 6 (l 7 (l 3 (l 9 (l 1-4 (l 1-5 (l	ne folk GSM Relea Relea Relea Relea Relea	owing rel Phase 2) ase 1996) ase 1997) ase 1998) ase 1999) ase 4) ase 5)	eases:
Reason for change	e: #	The lo CCPO	ogical moo CH resour	del for cor ces since	nmon it is u	reso nclea	urces is r which	somewha resource	at conf certai	<mark>fusing</mark> n rep	g particul etition's	arly in S- belong
Summary of chang	ge:	Rearra resour	inge the p ces.	icture to n	nake i	t clea	r which	statemen	ts belo	ong to	o which	common
Consequences if not approved:	ж	If this resou Backw This C errone it is no	CR was r irces is po ard Comp R is backy ous assur t backwar	not approv ssible. atibility ward comp nptions ba d compati	patible ased c	e how on a r all in	on over vever sin nisinterp stances	the numb ice an imp pretation c	per of a	allowo ntatic diagra	ed comn on could am it is p	non make possible
Clauses affected:	ж	6.24	1									
Other specs affected:	*	X Otl Te O8	her core s st specific M Specifi	pecificatic ations cations	ons	Ħ	25.430	v4.0.0 C	R 19			
Other comments:	ж											

How to create CRs using this form:

- 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 <u>ftp://www.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

6.2.4 Radio Network Logical resources

6.2.4.1 Common Resources

The CRNC manages logical radio network resources in Node B and needs to use both common and dedicated resources in a Node B to run a radio network. Therefore, it is the CRNC that orders the Node B to configure, reconfigure and delete these resources. However, if the equipment in Node B cannot fully support the configuration that the CRNC requests, or the equipment breaks down, then Node B can indicate the availability of the common resources (i.e. both downgrade and upgrade).

The common resources are the Cell, the common physical channels and the common transport channels.

In Node B these common resources have an operational state, that indicates whether they are operational or not, i.e. whether they can carry traffic or not.

Figure 3 shows the common resources that a CRNC is managing in a Node B to be able to run a radio network.

TS 25.430 Version 3.5.0 Release 99





The number or range above each box indicates how many of the channels named in that box can exist as "children" under one instant of a "parent" box to which the "child" box is connected.

The number or range beneath each box indicates how many of the channels named in that box can exist as "parent" boxes for one instant of a "child" channel to which the "parent" box is connected.

CPCId = Common Physical Channel Identifier

CTCId = Common Transport Channel Identifier

[TDD - The number of PICH = the number of PCH] [FDD - The number of AICH = the number of PRACH]

[TDD – PCH and FACHs can be mapped on one or more SCCPCH]

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TS 25.430 Version 3.5.0 Release 99



Figure 3: Common resources in a Node B that are managed by the CRNC

3GPP TSG-RAN WG3 Meeting #20 Pusan, South Korea, May 21 – 25, 2001

Tdoc R3-011365

CR-Form-v3											
	CHANGE	REQUEST									
ж	5.430 CR 19	# rev # Current version: 4.0.0 #									
For HELP on u	n this form see bottom of thi	s name or look at the non-un text over the # symbols									
Proposed change	Proposed change affects: # (U)SIM ME/UE Radio Access Network X Core Network										
Title: ೫	larification of Common Char	nel logical model									
Source: भ	-WG3										
Work item code: %	El	Date:									
Category: ж		Release: ೫ REL-4									
	e <u>one</u> of the following categorie F (essential correction) A (corresponds to a correction B (Addition of feature), C (Functional modification of D (Editorial modification) tailed explanations of the above found in 3GPP TR 21.900.	s: Use <u>one</u> of the following releases: 2 (GSM Phase 2) on in an earlier release) R96 (Release 1996) R97 (Release 1997) feature) R98 (Release 1998) R99 (Release 1999) e categories can REL-4 (Release 4) REL-5 (Release 5)									
Reason for change	H The logical model for cor	nmon resources is somewhat confusing particularly in S-									
	CCPCH resources since	it is unclear which resource certain repetition's belong									
Summary of chang	Rearrange the picture to n resources.	nake it clear which statements belong to which common									
Consequences if not approved:	If this CR was not approved the second secon	batible however since an implementation could make ased on a misinterpretation of the diagram it is possible ble in all instances.									
Clauses affected:	€ 6.2.4.1										
Other specs affected:	K X Other core specification Test specifications O&M Specifications	ns ¥ 25.430 v3.5.0 CR 18									
Other comments:	Ħ										

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Figure 3 shows the common resources that a CRNC is managing in a Node B to be able to run a radio network.

TS 25.430 Version 4.0.0 Release 4



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The number or range above each box indicates how many of the channels named in that box can exist as "children" under one instant of a "parent" box to which the "child" box is connected.

The number or range beneath each box indicates how many of the channels named in that box can exist as "parent" boxes for one instant of a "child" channel to which the "parent" box is connected.

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CTCId = Common Transport Channel Identifier

[TDD - The number of PICH = the number of PCH]

[FDD - The number of AICH = the number of PRACH]

[TDD – PCH and FACHs can be mapped on one or more SCCPCH]

Figure 3: Common resources in a Node B that are managed by the CRNC

3GPP TSG-RAN WG3 Meeting #21 Busan, South Korea, May 21-25 2001

	CR-Form-									
CHANGE REQUEST										
æ	25.430 CR CR-020 ^{# rev} - [#] Current version: 3.5.0 [#]									
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \Re symbols.										
Proposed change affects: # (U)SIM ME/UE Radio Access Network X Core Network										
Title: ೫	Traffic Management in Common Channels									
Source: ೫	R-WG3									
Work item code: ೫	TEI Date: # 2001-05-02									
Category: ж	F Release: # R99									
	Use one of the following categories:Use one of the following releases:F (essential correction)2(GSM Phase 2)A (corresponds to a correction in an earlier release)R96(Release 1996)B (Addition of feature),R97(Release 1997)C (Functional modification of feature)R98(Release 1998)D (Editorial modification)R99(Release 1999)Detailed explanations of the above categories can be found in 3GPP TR 21.900.REL-4(Release 4) REL-5									
Baasan far abang	The Downlink Shared Channel (DSCH) transport channel is listed as being a									
Reason for change	common channel in Section 5.2.5. The DSCH is already referenced in Section 5.2.7.									
Summary of chang	ge: # Removed the reference to DSCH in Section 5.2.5									
Consequences if not approved:	* The DSCH channel could be mistaken as a common channel.									
	The proposed change is backwards compatible.									
Clauses affected:	¥ <mark>5.2.5</mark>									
Other specs affected:	X Other core specifications X TS 25.430 v 4.0.0 CR 021 Test specifications O&M Specifications									
Other comments:	ж									

How to create CRs using this form:

- 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 <u>ftp://www.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

5.2.5 Traffic management of Common Channels

The common channels need to be controlled from the RNC. This is typically the control of the RACH, CPCH [FDD], DSCH and FACH channels, the information that is broadcast on the Broadcast control channel, and the control and request for sending information on the paging channels.

3GPP TSG-RAN WG3 Meeting #21 Busan, South Korea, May 21-25 2001

												CR-Form-v3
CHANGE REQUEST												
¥	25	<mark>.430</mark>	CR	CR-0	<mark>21</mark> [៛]	f rev	-	ж	Current vers	sion:	4.0.0	Ħ
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 X Core Network												
Title: ೫	Tra	ffic Ma	anagen	nent in C	Commor	Chan	nels					
Source: ೫	R-V	VG3										
Work item code: ₩	TE	Į							<i>Date:</i> ೫	200	1-05-02	
Category: ೫	Α								Release: ೫	REI	4	
Use one of the following categories:Use one of the following releaseF (essential correction)2A (corresponds to a correction in an earlier release)R96B (Addition of feature),R97C (Functional modification of feature)R98D (Editorial modification)R99D tetailed explanations of the above categories canREL-4be found in 3GPP TR 21.900.REL-5												
Reason for change	e: Ж	The com 5.2.7	Downli non ch ′.	nk Shar annel in	ed Char Section	nel (E 1 5.2.5	SCH) . The	trans DSCI	port channel H is already	l is list refere	ed as bei inced in S	ing a Section
Summary of chang	уе: Ж	Rem	oved t	ne refere	ence to l	DSCH	in Se	ction 5	5.2.5			
Consequences if # The DSCH channel could be mistaken as a common channel. not approved:												
		The pr	oposed	change i	s backwa	ards co	mpatib	ole.				
A 1												
Clauses affected:	ж	5.2.5										
Other specs affected:	ж	X Of Te O	ther co est spe &M Sp	re speci cificatior ecificatio	fications ns ons	; ;	€ TS	\$ 25.43	30 v 3.5.0 C	R 020		

Other comments:

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R3-011508

	CR-Form-v3									
CHANGE REQUEST										
H	25.430 CR 022 # rev _ # Current version: 3.5.0 #									
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 X Core Network									
Title: ж	Alignment of Cell description to NBAP									
Source: ೫	R-WG3									
Work item code: ℜ	TEI Date: ೫ May 2001									
Category: Ж	F Release: # R99									
	Use one of the following categories:Use one of the following releases:F (essential correction)2(GSM Phase 2)A (corresponds to a correction in an earlier release)R96(Release 1996)B (Addition of feature),R97(Release 1997)C (Functional modification of feature)R98(Release 1998)D (Editorial modification)R99(Release 1999)Detailed explanations of the above categories can be found in 3GPP TR 21.900.REL-4(Release 4)									
Reason for change	 # The current version of 25.430 states that when a cell is deleted and transport bearers exist, the Node B shall take no action to release those transport bearers. This behaviour is in contradiction with what is on the other hand specified in NBAP, which is the most lately revised specification. 									
Summary of chang	re: # The relevant sentence is modified and aligned to NBAP.									
Consequences if not approved:	* The specification would maintain an error. NBAP and 25.430 would not be aligned. Backward compatibility: this CR is not backward compatible with the previous version of 25.430, however it is backward compatible with the intended behaviour of the Node B described in 25.433.									
Clauses affected:	¥ 6.2.4.2									
Other specs affected:	X Other core specifications X CR 023 R4 on 25.430 Test specifications O&M Specifications									
Other comments:	¥									

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6.2.4.2 Cell

A Cell is identified by a UTRAN Cell identifier (UC-id) [1].

The semantics of a Cell include the following:

- The Cell can be created and removed by administrative procedures. When a Local Cell, i.e. equipment in a Node B, is made available to the CRNC for configuration of a cell, the CRNC can configure the cell with configuration data, common physical channels and common transport channels in Node B. In so doing a Local cell is added to the RNS.
- If any Iub transport bearers for common or dedicated transport channels exists when the cell is deleted, the Node B shall take no action to initiate the release of release those transport bearers.
- Node B may support one or more cells.
- Configuration of a cell over the Iub interface cannot be successful unless Node B has reported a Local Cell Id [1] as available to the CRNC.
- Once a Local Cell is configured to support a cell, it cannot be deleted without the CRNC first deleting the cell.

Figure 4 illustrates the state diagram for a Local Cell in Node B, as seen over the lub interface.

3GPP TSG-RAN3 Meeting #21 Busan, South Korea, 21st-25th May, 2001

R3-011509

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ж	25	. <mark>430</mark>	CR <mark>02</mark>	3	Ж re	ev	- *	Current ve	rsion:	4.0.0	ж
For <u>HELP</u> on u	sing i	his for	m, see bot	tom of this	s page	or lo	ook at ti	he pop-up te	xt over	the ¥ sy	mbols.
Proposed change a	affec	ts:	(U)SIM	ME	UE	F	Radio A	ccess Netwo	ork X	Core Ne	etwork
Title: #	Alic	Inment	t of Cell de	scription to	<mark>o NBA</mark>	Ρ					
Source: ೫	R-V	VG3									
Work item code: Ж	TE							Date:	₩ <mark>Ma</mark>	y 2001	
Category: Ж	Α							Release:	₩ <mark>RE</mark>	L-4	
	Use Deta be fo	one of a F (ess A (con B (Add C (Fur D (Edi iled exp und in	the following ential correct responds to dition of feat fortional modifi- blanations o 3GPP TR 2	g categories ction) a correctio ure), dification of cation) f the above 1.900.	s: on in an feature catego	earlie	er releas	Use <u>one</u> (2 se) R96 R97 R98 R99 REL-4 REL-5	of the fo (GSM (Rele (Rele (Rele (Rele (Rele	llowing rel A Phase 2) pase 1996) pase 1997) pase 1998) pase 1999) pase 4) pase 5)	eases:
Reason for change	e: #	25.43 Node in co most cons	30 3.5.0 sta B shall ta ntradiction lately revision istent mod	ates that w ke no action with what sed specifification is	vhen a on to r is on ication neede	cell eleas the o . As ed als	is delet se thos ther ha this ne so for 2	ed and trans e transport b ind specified eds to be cor 5.430 4.0.0.	port be earers. in NBA rected	earers exis This beh AP, which for R99, s	st, the aviour is is the a
Summary of chang	е: Ж	The	relevant se	ntence is	modifi	ed ar	nd aligr	ned to NBAP			
Consequences if not approved:	ж	The s align previ beha	specificatic ed. Backw ous versio viour of the	on would m ard compa n of 25.43 e Node B o	naintai atibility 0, how descril	n an : this /ever bed i	error. I CR is it is ba n 25.43	NBAP and 25 not backward ckward com 33.	5.430 w d comp patible	ould not l patible with with the i	be In the Intended
Clauses affected:	ж	6.2.4	.2								
Other specs affected:	ж	X Ot Te Od	her core s est specific &M Specifi	pecificatio ations cations	ns	ж	CR 02	2 R99 on 25	.430		
Other comments:	Ħ										

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