TSG RAN Meeting #17
Biarritz, France, 3 - 6 September, 2002

RP-020608

Title	CRs (Rel-4 and Rel-5 Category A) to TS 25.430
Source	**TSG RAN WG3**
Agenda Item	**7.3.4**

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-021862	25.430	4.3.0	4.4.0	REL-4	034	-	F	TDD number of PICH.	TEI4
R3-021863	25.430	5.1.0	5.2.0	REL-5	035	-	A	TDD number of PICH.	TEI4

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.430** CR **034** | ⌘**rev** | **-** | ⌘ | Current version: | **4.3.0** | ⌘ |

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 **X** Core Network ☐

Title: ⌘	TDD number of PICH Correction

Source: ⌘	RAN WG3

Work item code: ⌘	TEI4	***Date:*** ⌘	19/08/2002

Category: ⌘ **F**	***Release:*** ⌘ Rel-4

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: ⌘	The diagram in 25.430 is inconsistent with the rest of the RAN specifications concerning the number of PICHs and PCHs allowed in a cell for TDD. All of the other RAN specifications have nothing that contradicts the idea that FDD and TDD both have the possibility to have multiple PICH and PCH. But the diagram in 25.430 shows that there can be at most one PICH in a cell for TDD, and the note at the bottom states that the number of PCHs equals the number of PICHs and thus it equals 1 at most also. If the limit of 1 PICH would remain: - It means that all SCCPCH Sets to which any UE is listening, would have the same PCH information - to prevent an UE missing a PCH messages intended for that UE. - So it means duplication of PCH information to several SCCPCHs. - The possibility of a UE, to select a SCCPCH set out of many, according 25.304, does only make sense if there is more than one PCH, i.e. 1 PCH per SCCPCH set which the UE can choose. Therefore there is no reason at all to leave this inconsistency between a stage 2 description and a stage 3 description in Release 4 and Release 5 specifications
Summary of change: ⌘	Diagram modified to allow for 0 to i instances of PICH thus aligning TDD with FDD.
Consequences if not approved: ⌘	Confusion over the diagram means a risk that an implementation may have FDD and TDD deviate from each other just on the basis of this diagram. Impact Analysis: Impact assessment towards the previous version of the specification (same

release):

This CR has isolated impact since it has the possibility to impact only the mapping of PCH to S-CCPCH for TDD.

Correction to a function where the specification was:

o   Ambiguous due to this specification stating something that was inconsistent with every other specification.

Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

Clauses affected:	⌘	6.2.4			
		Y	**N**		
Other specs	⌘	X		Other core specifications	⌘ 25.430 v5.1.0 CR 035
affected:			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.

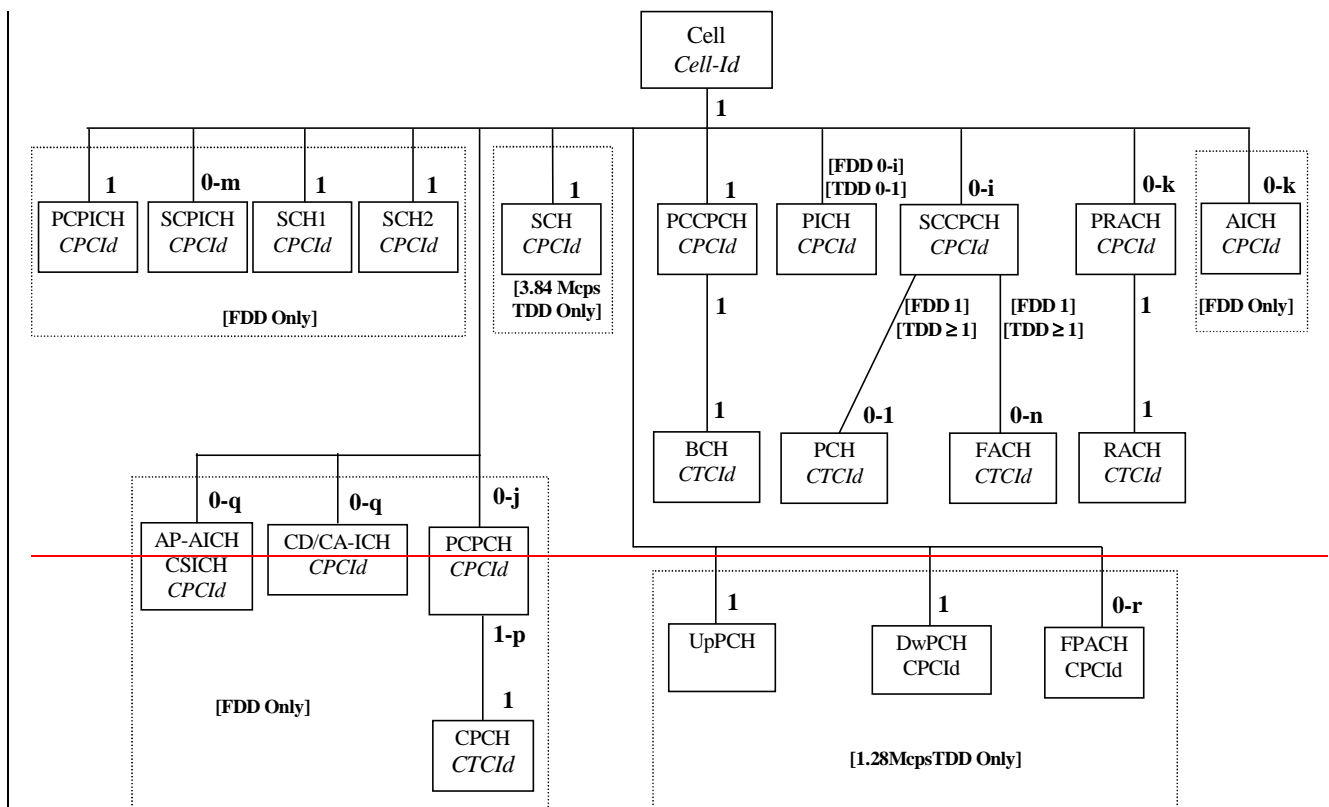# 6.2.4   Radio Network Logical resources

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.

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.
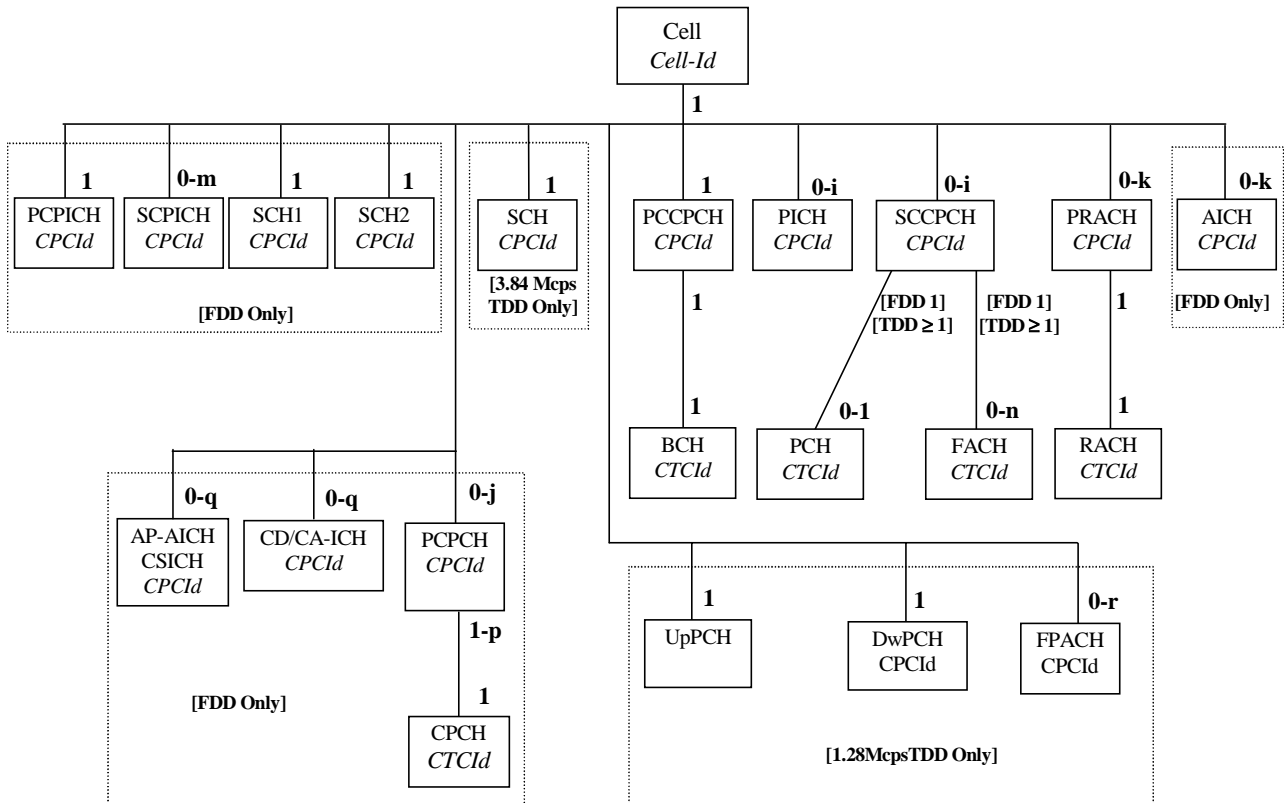 *CPCId* = Common Physical Channel Identifier
  CTCId = Common Transport Channel Identifier
  [TDD - The number of PICH = the number of PCH]
  [FDD - The number of AICH = the number of PRACH]
  [TDD – PCH and FACHs can be mapped on one or more SCCPCH]

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CPCId = Common Physical Channel Identifier

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

<table>
<tr><td colspan="3" align="right"><i>CR-Form-v7</i></td></tr>
<tr><td colspan="3" align="center"><h1>CHANGE REQUEST</h1></td></tr>
</table>

⌘   **25.430** CR **035**   ⌘**rev** **-** ⌘ Current version: **5.1.0** ⌘

*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 **X** Core Network ☐

Title: ⌘	TDD number of PICH Correction
Source: ⌘	RAN WG3
Work item code:⌘	TEI4 ***Date:*** ⌘ 19/08/2002

Category: ⌘   **A**   ***Release:*** ⌘   Rel-5

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		Y	**N**			
Other specs	⌘	**X**		Other core specifications	⌘	25.430 v4.3.0 CR 034
affected:			**X**	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

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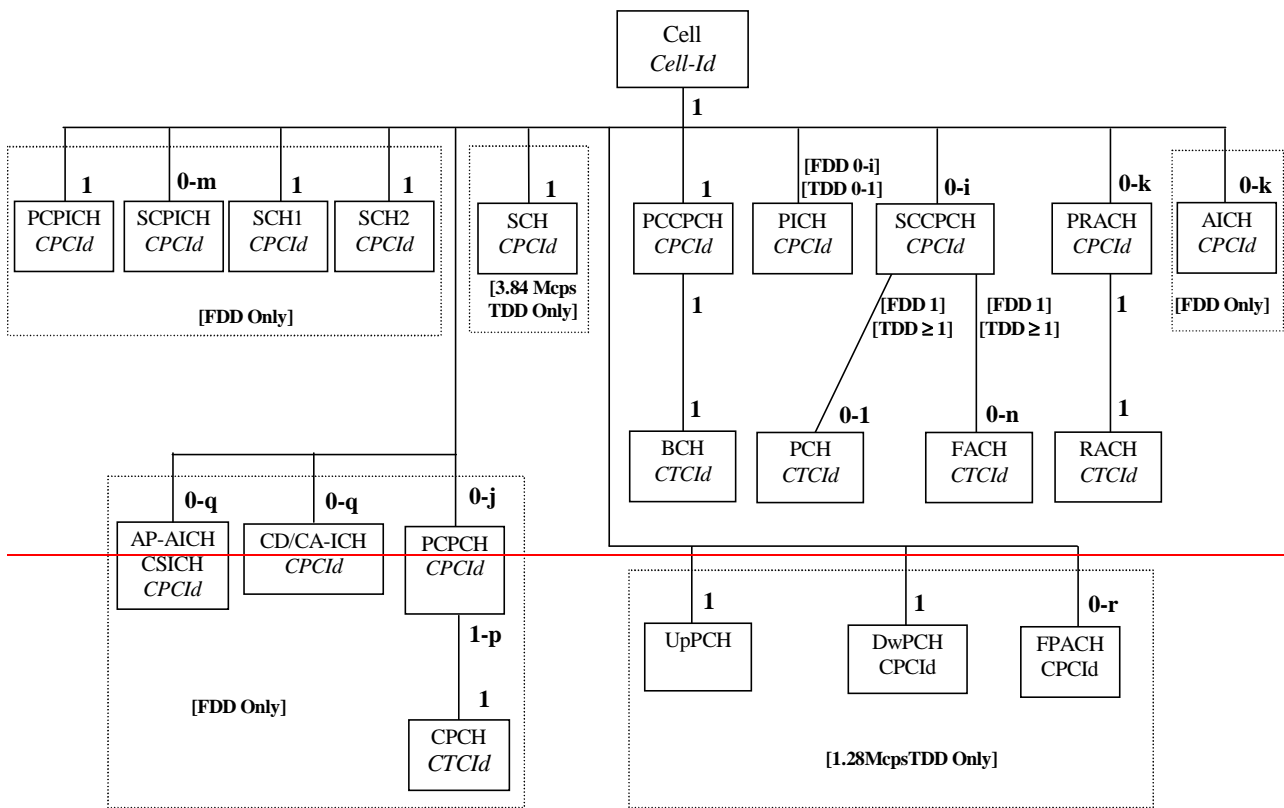## 6.2.4   Radio Network Logical resources

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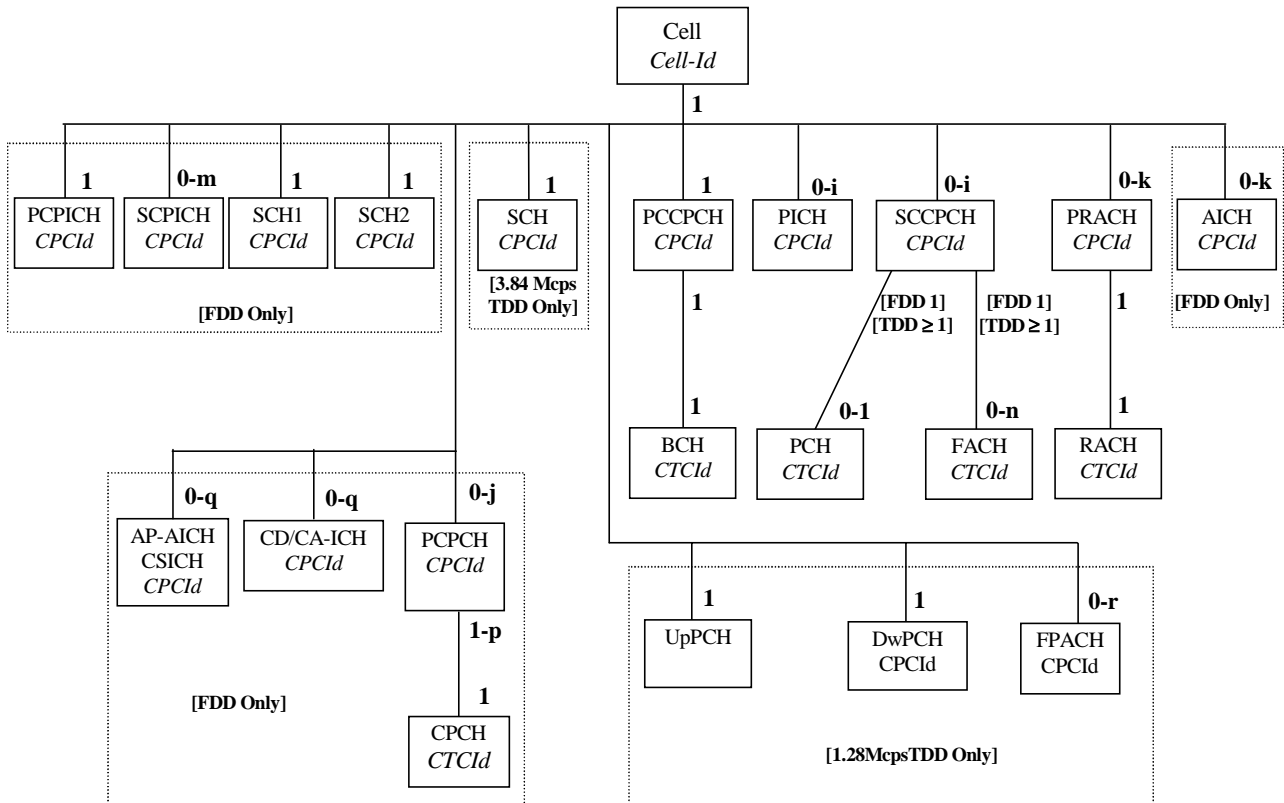
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```
                                          ┌──────────┐
                                          │   Cell   │
                                          │ Cell-Id  │
                                          └──────────┘
                                                │ 1
```


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