

TSG RAN Meeting #20
Hämeenlinna, Finland, 3 - 6 June, 2003

RP-030318

Title CR (Rel-5 only) to 25.402 on Removal of the Frequency Acquisition for Late-Entrant Cells for 1.28Mcps TDD
Source TSG RAN WG3
Agenda Item 7.3.5

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-030630	25.402	5.1.0	5.2.0	REL-5	039	-	F	Removal of the Frequency Acquisition for Late-Entrant Cells for 1.28Mcps TDD	RANimp-NBSLCR

CHANGE REQUEST

25.402 CR 039 # 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 Core Network

Title:	# Removal of the Frequency Acquisition for Late-Entrant Cells for 1.28Mcps TDD		
Source:	# RAN WG3		
Work item code:	# RANimp-NBSLCR	Date:	# 19/05/2003
Category:	# F	Release:	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (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 (Release 5)
			Rel-6 (Release 6)

Reason for change:	# The Frequency acquisition for Late- Entrant cells for 1.28Mcps TDD is neither defined in RAN1 (TS 25.224 section 5.7) nor in NBAP.
Summary of change:	# Frequency acquisition for Late-Entrant cells for 1.28Mcps TDD is removed.
Consequences if not approved:	# If this CR is not approved, the frequency acquisition for Late-Entrant cells for LCR TDD is remaining but it is not defined in RAN1 and in other RAN3 specifications. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because the frequency acquisition for Late-Entrant cells for LCR TDD is removed. This CR has an impact under functional point of view. The impact can be considered isolated because the change affects one function namely Node B Synchronisation for LCR TDD.

Clauses affected:	# 6.1.2.3.4								
Other specs affected:	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">#</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">#</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">#</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications # Test specifications # O&M Specifications #	Y	N	#	X	#	X	#	X
Y	N								
#	X								
#	X								
#	X								
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.

6.1.2.3.4 Late-Entrant Cells

The scheme for introducing new cells into a synchronized RNS is as follows:

- 1) Late-entrant cells (new cells being added without reference clock) or cells recovering from unavailability shall first be roughly synchronised via Iub interface messages. Therefore, first the DL Transport Channels Synchronisation procedure or the Node Synchronisation procedure on the PCH frame protocol shall be performed in order to determine the deviation from the reference SFN. The RNC then sends a CELL SYNCHRONISATION ADJUSTMENT message to the late-entrant cells for SFN update.
- ~~2) Frequency acquisition of the late-entrant cell is started by instructing the late-entrant cell first to listen to the regular schedule of SYNC_DL codes of the surrounding cells. The transmission schedule of the surrounding cells shall be signalled to the late-entrant cell within the CELL SYNCHRONISATION INITIATION REQUEST message. Frequency locking is reported using the CELL SYNCHRONISATION REPORT message.~~
- 3) The RNC should tell the late-entrant which SYNC_DL codes and carrier frequencies to listen for, corresponding to its neighbour cells signalled within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.
- 4) The late-entrant then reports the timing of the SYNC_DL codes using the CELL SYNCHRONISATION REPORT message. The RNC knows the location of all cells and therefore should be able to compute a timing adjustment for the late-entrant that takes into account the expected propagation delays between the late-entrant and its neighbouring cells. The RNC adjusts the cell and the cycle is repeated until the RNC is satisfied that the cell's timing accuracy fulfills the requirements to be allowed to enter the Steady State phase.