

3GPP TSG-RAN Meeting #24
Seoul, Korea, 02– 04 June, 2004

Tdoc ⌘ **RP-040252**

CR-Form-v7

CHANGE REQUEST

⌘ **25.133 CR 674** ⌘ rev **1** ⌘ Current version: **5.10.0** ⌘

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 of UE procedure in case of HHO failure		
Source:	⌘ Nortel Networks, Ericsson, Qualcomm, Nokia		
Work item code:	⌘ TEI5	Date:	⌘ 02/06/2004
Category:	⌘ F	Release:	⌘ Rel 5
	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:	⌘ Improve consistency of UE behaviour in order to facilitate network configuration and further reduce the risk of dropped calls in case of inter-RAT, intra- or inter-frequency hard handover.
Summary of change:	⌘ A corresponding CR to 25.214 clarifies that UE shall follow the synchronisation procedure A when attempting to re-establish the DPCH after a inter-RAT, intra- or inter-frequency hard handover failure. For the 25.133, it is clarified that the same UL transmission timing should be used when the UE resumes transmission after an Handover failure. Isolated Impact Analysis: This CR clarifies the UE behaviour in case of hard handover failure and does not affect the UE behaviour in any other scenario. It therefore has an isolated impact. Furthermore this CR is backward compatible with earlier versions of the specification.
Consequences if not approved:	⌘ Inconsistent UE behaviour resulting in more challenging network configuration and possibly more dropped calls resulting from handover attempts.

Clauses affected:	⌘ 7.1.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <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;">X</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications	Y	N	X	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	X	⌘ 25.214	
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	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.

7 Timing and Signalling characteristics

7.1 UE Transmit Timing

7.1.1 Introduction

The UE shall have capability to follow the frame timing change of the connected Node B. The uplink DPCCH/DPDCH frame transmission takes place approximately T_0 chips after the reception of the first detected path (in time) of the corresponding downlink DPCCH/DPDCH frame from the reference cell T_0 is defined in [2]. UE initial transmit timing accuracy, maximum amount of timing change in one adjustment, minimum and maximum adjustment rate are defined in the following requirements.

7.1.2 Requirements

The UE initial transmission timing error shall be less than or equal to ± 1.5 Chip. The reference point for the UE initial transmit timing control requirement shall be the time when the first detected path (in time) of the corresponding downlink DPCCH/DPDCH frame is received from the reference cell plus T_0 chips. T_0 is defined in [2].

When the UE is not in soft handover, the reference cell shall be the one the UE has in the active set. The cell, which is selected as a reference cell, shall remain as a reference cell even if other cells are added to the active set. In case that the reference cell is removed from the active set the UE shall start adjusting its transmit timing no later than the time when the whole active set update message is available at the UE taking the RRC procedure delay into account.

When the UE attempts to re establish all dedicated physical channel(s) after an inter-RAT, intra- or inter-frequency hard-handover failure [18], it should resume UL transmission with the same transmit timing as used immediately before the handover attempt. After resuming transmission, transmit timing adjustment requirements defined in the remainder of this clause apply.

The UE shall be capable of changing the transmission timing according the received downlink DPCCH/DPDCH frame. The maximum amount of the timing change in one adjustment shall be $\frac{1}{4}$ Chip.

The minimum adjustment rate shall be 233ns per second. The maximum adjustment rate shall be $\frac{1}{4}$ chip per 200ms. In particular, within any given $800 \cdot d$ ms period, the UE transmit timing shall not change in excess of $\pm d$ chip from the timing at the beginning of this $800 \cdot d$ ms period, where $0 \leq d \leq 1/4$.