TSG-RAN Meeting #27 **RP-050070**
Tokyo, Japan, 09-11 March 2005 **Agenda item 8.3.5**

Source: TSG-RAN WG2

Title: CRs to 25.331 (2)

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Workitem
25.331	2509	-	Rel-5	Handling of TM SRB's at radio link failure	F	5.11.0	5.12.0	R2-050592	TEI5
25.331	2510	-	Rel-6	Handling of TM SRB's at radio link failure	A	6.4.0	6.5.0	R2-050593	TEI5
25.331	2512	-	Rel-5	Removal of the UARFCN uplink (Nu) in the informative Annex A.3	F	5.11.0	5.12.0	R2-050596	TEI5
25.331	2513	-	Rel-6	Removal of the UARFCN uplink (Nu) in the informative Annex A.3	A	6.4.0	6.5.0	R2-050597	TEI5
25.331	2514	1	Rel-5	Correction on PRACH selection	F	5.11.0	5.12.0	R2-050693	TEI5
25.331	2515	1	Rel-6	Correction on PRACH selection	A	6.4.0	6.5.0	R2-050694	TEI5
25.331	2520	-	Rel-5	Unsupported RLC mode reconfigurations	F	5.11.0	5.12.0	R2-050612	TEI5
25.331	2521	-	Rel-6	Unsupported RLC mode reconfigurations	A	6.4.0	6.5.0	R2-050613	TEI5
25.331	2522	-	Rel-5	Correction to Inter RAT cell info indication	F	5.11.0	5.12.0	R2-050616	TEI5
25.331	2523	-	Rel-6	Correction to Inter RAT cell info indication	A	6.4.0	6.5.0	R2-050617	TEI5

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331** CR **2509** ⌘**rev** ⌘ Current version: **5.b.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 **X** Radio Access Network ☐ Core Network ☐

Title: ⌘	Handling of TM SRB's at radio link failure	
Source: ⌘	RAN WG2	
Work item code:⌘ TEI5		***Date:*** ⌘ January 2005

Category: ⌘ **F**

Use *one* of the following categories:	Use *one* of the following releases:
F *(correction)*	*Ph2 (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)
	Rel-7 (Release 7)

Release: ⌘ Rel-5

Reason for change: ⌘	Presence of a TM SRB during radio link failure will result in going to RRC-Idle, since: - section 8.5.21 requires checking the mapping of such TM-SRB's; - these TM-SRB's will not have a mapping option for CELL_FACH state; - when one or mode SRB's do not have a mapping option for the transport channel to be used, the UE proceeds to Idle mode (see text highlighted in yello).
Summary of change:⌘	This CR clarifies that only the mapping of SRBs 1-4 should be checked untill the first succesfully complete cell update procedure. **Implementation of this CR by a Rel4 UE will not cause compatibility issues.** **Isolated Impact Analysis** Functionality corrected: Radio Link Failure handling Isolated impact statement: Correction to a function where specifications are incorrect. No impact on UTRAN. A UE not implementing this correction and operating in a UTRAN which uses TM SRB's for rate control, will go to IDLE when a radio link failure happens. I.e. no re-establishment of the speech call is possible.
Consequences if not approved: ⌘	Increased call drop rate
Clauses affected: ⌘	8.5.21

		Y	N		
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.

8.5.21   Actions related to Radio Bearer mapping

When the UE receives the IE "RB mapping info" and/or the IE "Transport format set" and/or the IE "Added or reconfigured MAC-d flow", when the UE performs a cell reselection or a state transition, or when the UE releases a RB, the UE shall for each of the configured Radio Bearers:

1> upon moving to CELL_FACH state from CELL_DCH state to initiate a cell update procedure and upon subsequent cell reselections until the first successfully completed cell update procedure, perform the actions defined in the remainder of this subclause only for ~~signalling radio bearers~~ SRB1, SRB2, SRB3 and SRB4;

1> for FDD, select the multiplexing option according to the following:

2> if the UE is in CELL_FACH state:

3> if the RB has a multiplexing option with transport channel type "FACH" for the DL and transport channel type "RACH" for the UL:

4> select this multiplexing option.

2> if the UE is in CELL_DCH state:

3> if the RB has a multiplexing option with transport channel type "DCH + HS-DSCH" for the DL, and both the corresponding DCH transport channel and MAC-d flow are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH + DSCH" for the DL, and both the corresponding DCH and DSCH transport channels are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "HS-DSCH" for the DL, and the corresponding MAC-d flow is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH" for the DL, and the corresponding DCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option.

1> for TDD, select the multiplexing option according to the following:

2> if the UE is in CELL_FACH state:

3> if the RB has the multiplexing options with the transport channel types "FACH" and "DSCH" for the DL, and the corresponding FACH and DSCH transport channels are configured, and with the transport channel types "RACH" and "USCH" for the UL, and the corresponding RACH and USCH transport channels are configured:

4> if both PUSCH and PDSCH are allocated:

5> select the multiplexing option "DSCH" for DL and "USCH" for UL; else

4> if only PUSCH is allocated:

      5> select the multiplexing option "FACH" for DL and "USCH" for UL; else

    4> if only PDSCH is allocated:

      5> select the multiplexing option "DSCH" for DL and "RACH" for UL; else

    4> if neither PUSCH nor PDSCH is allocated:

      5> select the multiplexing option "FACH" for DL and "RACH" for UL.

  3> if the RB has a single multiplexing option with the transport channel type "FACH" for the DL and the transport channel type "RACH" for the UL:

    4> select this multiplexing option; else

  3> if the RB has a single multiplexing option with the transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with the transport channel type "USCH" for the UL, and the corresponding USCH transport channel is configured:

    4> select this multiplexing option; else

2> if the UE is in CELL_DCH state:

  3> if the RB has a multiplexing option with transport channel type "DCH + HS-DSCH" for the DL, and both the corresponding DCH transport channel and MAC-d flow are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

    4> select this multiplexing option; else

  3> if the RB has a multiplexing option with transport channel type "DCH + DSCH" for the DL, and both the corresponding DCH and DSCH transport channels are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

    4> select this multiplexing option; else

  3> if the RB has a multiplexing option with transport channel type "HS-DSCH" for the DL, and the corresponding MAC-d flow is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

    4> select this multiplexing option; else

  3> if the RB has a multiplexing option with transport channel type "DCH" for the DL, and the corresponding DCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

    4> select this multiplexing option; else

  3> if theRB has a multiplexing option with transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with transport channel "USCH" for the UL, and the corresponding USCH transport channel is configured:

    4> select this multiplexing option.

1> configure the MAC with the appropriate transport format set (with computed transport block sizes) for the transport channel used by that RB;

1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if none were received);

1> in case the selected multiplexing option is a multiplexing option on RACH:

  2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.

  2> if there is no remaining RLC size index corresponding to an RLC size within the Transport Format Set stored for RACH:

        3> set the variable INVALID_CONFIGURATION to TRUE.

1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:

    2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.

NOTE: The IE "RB mapping info" is only included in the IE "Predefined RB configurations" in system information when used for Inter-RAT handover to UTRAN and there is no AM RLC size change involved in this case.

1> if that RB is using AM and the RLC size applicable to the uplink logical channel transporting data PDUs is different from the one derived from the previously stored configuration; and

1> none of the following conditions is met:

    -   The RLC size change is caused by a CELL UPDATE CONFIRM and the CELL UPDATE CONFIRM message includes the IE "Downlink counter synchronisation info";

    -   The RLC size change is caused by a reconfiguration message, and a cell update procedure occurs during this reconfiguration procedure and the CELL UPDATE CONFIRM message includes the IE "RLC re-establish indicator" being set to TRUE for the corresponding radio bearer.

    2> if the RLC size change is caused by a reconfiguration message or a CELL UPDATE CONFIRM; and

    2> the IE "one sided RLC re-establishment" is included in that message and is set to TRUE:

        3> re-establish the transmitting side of the corresponding RLC entity.

    2> else:

        3> re-establish the corresponding RLC entity.

    2> configure the corresponding RLC entity with the new uplink RLC size;

    2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and

    2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:

        3> if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":

            4> if the information causing the RLC re-establishment was included in system information:

                5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.

NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell. Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.

            4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:

                5> if the whole RLC entity was re-established:

                    6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

                5> if only the transmitting side of the RLC entity was re-established:

                    6> set the HFN value for the corresponding RLC entity in the uplink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

4> if the RLC re-establishment is caused by a reconfiguration message:

    5> if the whole RLC entity was re-established:

        6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

    5> if only the transmitting side of the RLC entity was re-established:

        6> set the HFN value for the corresponding RLC entity in the direction uplink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

NOTE1:   If the UTRAN modifies the RLC size for RB2 on any reconfiguration message or Cell Update Confirm message, the UE behaviour is unspecified in this version of the specification.

NOTE2:   The UE cannot rely on the configured Transport Formats to determine the RLC sizes to be used in downlink for a particular logical channel. This size can be signalled explicitly in the RLC Info IE.

1> if that RB is using UM:

    2> indicate the largest RLC size applicable for uplink to the corresponding RLC entity.

1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);

1> configure the MAC with the logical channel priorities according to selected multiplexing option;

1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;

1> if there is no multiplexing option applicable for the transport channels and MAC-d flows to be used:

    2> set the variable INVALID_CONFIGURATION to TRUE.

1> if there is more than one multiplexing option applicable for the transport channels or MAC-d flows to be used:

    2> set the variable INVALID_CONFIGURATION to TRUE.

If upon cell re-selection or upon moving to CELL_FACH state from CELL_DCH state to initiate cell update procedure the UE sets variable INVALID_CONFIGURATION to TRUE as a result of the actions defined in this subclause, the UE should:

1> move to idle mode;

1> release (locally) the established signalling connections (as stored in the variable ESTABLISHED_SIGNALLING_CONNECTIONS) and the established radio access bearers (as stored in the variable ESTABLISHED_RABS) and indicate this to upper layers;

1> perform other actions when entering idle mode from connected mode as specified in subclause 8.5.2.

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331** CR **2510** ⌘ **rev** ⌘ Current version: **6.4.0** ⌘

*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 **X** Radio Access Network ☐   Core Network ☐

Title:	⌘	Handling of TM SRB's at radio link failure	
Source:	⌘	RAN WG2	
Work item code:	⌘ TEI5	***Date:*** ⌘	January 2005
Category:	⌘ **A**	***Release:*** ⌘	Rel-6

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:
Ph2   *(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)*
Rel-7   *(Release 7)*

Reason for change:	⌘	Presence of a TM SRB during radio link failure will result in going to RRC-Idle, since:

- section 8.5.21 requires checking the mapping of such TM-SRB's;
- these TM-SRB's will not have a mapping option for CELL_FACH state;
- when one or mode SRB's do not have a mapping option for the transport channel to be used, the UE proceeds to Idle mode (see text highlighted in yello).

Summary of change:	⌘	This CR clarifies that only the mapping of SRBs 1-4 should be checked untill the first succesfully complete cell update procedure.

Implementation of this CR by a Rel4 UE will not cause compatibility issues.

Isolated Impact Analysis
Functionality corrected: Radio Link Failure handling

Isolated impact statement: Correction to a function where specifications are incorrect. No impact on UTRAN.
A UE not implementing this correction and operating in a UTRAN which uses TM SRB's for rate control, will go to IDLE when a radio link failure happens. I.e. no re-establishment of the speech call is possible.

Consequences if not approved:	⌘	Increased call drop rate

Clauses affected:	⌘	8.5.21

		Y	**N**		
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.

8.5.21   Actions related to Radio Bearer mapping

When the UE receives the IE "RB mapping info" and/or the IE "Transport format set", when transport channels, MAC-d flows or E-DCH MAC-d flows are added or deleted, when the UE performs a cell reselection or a state transition, or when the UE releases a RB, the UE shall for each of the configured Radio Bearers:

1> upon moving to CELL_FACH state from CELL_DCH state to initiate a cell update procedure and upon subsequent cell reselections until the first successfully completed cell update procedure, perform the actions defined in the remainder of this subclause only for ~~signalling radio bearers~~ SRB1, SRB2, SRB3 and SRB4;

1> for FDD, select the multiplexing option according to the following:

2> if the UE is in CELL_FACH state:

3> if the RB has a multiplexing option with transport channel type "FACH" for the DL and transport channel type "RACH" for the UL:

4> select this multiplexing option.

2> if the UE is in CELL_DCH state:

3> if the RB has a multiplexing option with transport channel type "DCH + HS-DSCH" for the DL, and both the corresponding DCH transport channel and MAC-d flow are configured, and with transport channel type "E-DCH" for the UL, and the corresponding E-DCH MAC-d flow is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH + HS-DSCH" for the DL, and both the corresponding DCH transport channel and MAC-d flow are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH + DSCH" for the DL, and both the corresponding DCH and DSCH transport channels are configured, and with transport channel type "E-DCH" for the UL, and the corresponding E-DCH MAC-d flow is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH + DSCH" for the DL, and both the corresponding DCH and DSCH transport channels are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "HS-DSCH" for the DL, and the corresponding MAC-d flow is configured, and with transport channel type "E-DCH" for the UL, and the corresponding E-DCH MAC-d flow is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "HS-DSCH" for the DL, and the corresponding MAC-d flow is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with transport channel type "E-DCH" for the UL, and the corresponding E-DCH MAC-d flow is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH" for the DL, and the corresponding DCH transport channel is configured, and with transport channel type "E-DCH" for the UL, and the corresponding E-DCH MAC-d flow is configured:

4> select this multiplexing option.

3> if the RB has a multiplexing option with transport channel type "DCH" for the DL, and the corresponding DCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option.

1> for TDD, select the multiplexing option according to the following:

2> if the UE is in CELL_FACH state:

3> if the RB has the multiplexing options with the transport channel types "FACH" and "DSCH" for the DL, and the corresponding FACH and DSCH transport channels are configured, and with the transport channel types "RACH" and "USCH" for the UL, and the corresponding RACH and USCH transport channels are configured:

4> if both PUSCH and PDSCH are allocated:

5> select the multiplexing option "DSCH" for DL and "USCH" for UL; else

4> if only PUSCH is allocated:

5> select the multiplexing option "FACH" for DL and "USCH" for UL; else

4> if only PDSCH is allocated:

5> select the multiplexing option "DSCH" for DL and "RACH" for UL; else

4> if neither PUSCH nor PDSCH is allocated:

5> select the multiplexing option "FACH" for DL and "RACH" for UL.

3> if the RB has a single multiplexing option with the transport channel type "FACH" for the DL and the transport channel type "RACH" for the UL:

4> select this multiplexing option; else

3> if the RB has a single multiplexing option with the transport channel type "DSCH" for the DL, and the corresponding DSCH tranfsport channel is configured, and with the transport channel type "USCH" for the UL, and the corresponding USCH transport channel is configured:

4> select this multiplexing option; else

2> if the UE is in CELL_DCH state:

3> if the RB has a multiplexing option with transport channel type "DCH + HS-DSCH" for the DL, and both the corresponding DCH transport channel and MAC-d flow are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

3> if the RB has a multiplexing option with transport channel type "DCH + DSCH" for the DL, and both the corresponding DCH and DSCH transport channels are configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

4> select this multiplexing option; else

    3> if the RB has a multiplexing option with transport channel type "HS-DSCH" for the DL, and the corresponding MAC-d flow is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

        4> select this multiplexing option; else

    3> if the RB has a multiplexing option with transport channel type "DCH" for the DL, and the corresponding DCH transport channel is configured, and with transport channel type "DCH" for the UL, and the corresponding DCH transport channel is configured:

        4> select this multiplexing option; else

    3> if theRB has a multiplexing option with transport channel type "DSCH" for the DL, and the corresponding DSCH transport channel is configured, and with transport channel "USCH" for the UL, and the corresponding USCH transport channel is configured:

        4> select this multiplexing option.

1> configure the MAC with the appropriate transport format set (with computed transport block sizes) for the transport channel used by that RB;

1> determine the sets of RLC sizes that apply to the logical channels used by that RB, based on the IEs "RLC size list" and/or the IEs "Logical Channel List" included in the applicable "Transport format set" (either the ones received in the same message or the ones stored if none were received);

1> in case the selected multiplexing option is a multiplexing option on RACH:

    2> ignore the RLC size indexes that do not correspond to any RLC size within the Transport Format Set stored for RACH.

    2> if there is no remaining RLC size index corresponding to an RLC size within the Transport Format Set stored for RACH:

        3> set the variable INVALID_CONFIGURATION to TRUE.

1> if RACH is the transport channel to be used on the uplink, if that RB has a multiplexing option on RACH and if it is using AM:

    2> apply the largest size amongst the ones derived according to the previous bullet for the RLC size (or RLC sizes in case the RB is realised using two logical channels) for the corresponding RLC entity.

NOTE: The IE "RB mapping info" is only included in the IE "Predefined RB configurations" in system information when used for Inter-RAT handover to UTRAN and there is no AM RLC size change involved in this case.

1> if that RB is using AM and the RLC size applicable to the uplink logical channel transporting data PDUs is different from the one derived from the previously stored configuration; and

1> none of the following conditions is met:

    -   the RLC size change is caused by a CELL UPDATE CONFIRM and the CELL UPDATE CONFIRM message includes the IE "Downlink counter synchronisation info".

    -   the RLC size change is caused by a reconfiguration message, and a cell update procedure occurs during the reconfiguration procedure and the CELL UPDATE CONFIRM message includes the IE "Downlink counter synchronisation info".

    -   the RLC size change is caused by a reconfiguration message, and a cell update procedure occurs during this reconfiguration procedure and the CELL UPDATE CONFIRM message includes the IE "RLC re-establish indicator" being set to TRUE for the corresponding radio bearer.

    2> if the RLC size change is caused by a reconfiguration message or a CELL UPDATE CONFIRM; and

    2> the IE "one sided RLC re-establishment" is included in that message and is set to TRUE:

        3> re-establish the transmitting side of the corresponding RLC entity.

    2> else:

        3> re-establish the corresponding RLC entity.

    2> configure the corresponding RLC entity with the new uplink RLC size;

    2> for each AM RLC radio bearer in the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" in the variable ESTABLISHED_RABS whose RLC size is changed; and

    2> for each AM RLC signalling radio bearer in the CN domain as indicated in the IE "CN domain identity" in the variable LATEST_CONFIGURED_CN_DOMAIN whose RLC size is changed:

        3> if the IE "Status" in the variable CIPHERING_STATUS of this CN domain is set to "Started":

            4> if the information causing the RLC re-establishment was included in system information:

                5> set the HFN values for the corresponding RLC entity equal to the value of the IE "START" for this CN domain that will be included in the CELL UPDATE message following cell reselection.

NOTE: Since the UE cannot predict the START value at the time of the next CELL UPDATE transmission in the future, UTRAN should desist from changing the RLC size for a signalling radio bearer within a cell. Other than this case the change in RLC size for a signalling radio bearer is known to the UE when reading system information following cell reselection.

            4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:

                5> if the whole RLC entity was re-established:

                    6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

                5> if only the transmitting side of the RLC entity was re-established:

                    6> set the HFN value for the corresponding RLC entity in the uplink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

            4> if the RLC re-establishment is caused by a reconfiguration message:

                5> if the whole RLC entity was re-established:

                    6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

                5> if only the transmitting side of the RLC entity was re-established:

                    6> set the HFN value for the corresponding RLC entity in the direction uplink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

NOTE1:   If the UTRAN modifies the RLC size for RB2 on any reconfiguration message or Cell Update Confirm message, the UE behaviour is unspecified in this version of the specification.

NOTE2:   The UE cannot rely on the configured Transport Formats to determine the RLC sizes to be used in downlink for a particular logical channel. This size can be signalled explicitly in the RLC Info IE.

1> if that RB is using UM:

    2> indicate the largest RLC size applicable for uplink to the corresponding RLC entity.

1> configure MAC multiplexing according to the selected multiplexing option (MAC multiplexing shall only be configured for a logical channel if the transport channel it is mapped on according to the selected multiplexing option is the same as the transport channel another logical channel is mapped on according to the multiplexing option selected for it);

    1> configure the MAC with the logical channel priorities according to selected multiplexing option;

    1> configure the MAC with the set of applicable RLC Sizes for each of the logical channels used for that RB;

    1> if there is no multiplexing option applicable for the transport channels and MAC-d flows to be used:

        2> set the variable INVALID_CONFIGURATION to TRUE.

    1> if there is more than one multiplexing option applicable for the transport channels or MAC-d flows to be used:

        2> set the variable INVALID_CONFIGURATION to TRUE.

If upon cell re-selection or upon moving to CELL_FACH state from CELL_DCH state to initiate cell update procedure the UE sets variable INVALID_CONFIGURATION to TRUE as a result of the actions defined in this subclause, the UE should:

    1> move to idle mode;

    1> release (locally) the established signalling connections (as stored in the variable ESTABLISHED_SIGNALLING_CONNECTIONS) and the established radio access bearers (as stored in the variable ESTABLISHED_RABS) and indicate this to upper layers;

    1> perform other actions when entering idle mode from connected mode as specified in subclause 8.5.2.

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **25.331** CR **2512** | ⌘rev | **-** | ⌘ | Current version: | **5.b.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 **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Removal of the UARFCN uplink (Nu) in the informative Annex A.3	
Source: ⌘	RAN WG2	
Work item code:⌘	TEI5	***Date:*** ⌘ 17/02/2005

Category: ⌘	**F**	***Release:*** ⌘	Rel-5
	Use one of the following categories:		*Use one of the following releases:*
	F (correction)		*Ph2 (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		*Rel-4 (Release 4)*
	be found in 3GPP TR 21.900.		*Rel-5 (Release 5)*
			Rel-6 (Release 6)
			Rel-7 (Release 7)

Reason for change: ⌘	In 10.3.6.36 Frequency info, the UARFCN uplink (Nu) is optional IE and when it is not present the semantics description defines that default duplex distance defined for the operating frequency band shall be used as defined in TS25.101 However, in annex A.3 it is stated that default duplex distance of 190MHz should be used.
Summary of change:⌘	As the semantic part of the UARFCN uplink (Nu) is incorrect and the IE is not needed in annex A.3, the UARFCN uplink (Nu) IE field is removed completely from informative annex A.3
Consequences if not approved: ⌘	The normative and informative part are contradicting. Thus specification is unclear.

Clauses affected: ⌘	Annex A.3		
	Y **N**		
Other specs ⌘	☐ **X**	Other core specifications ⌘	
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.

A.3 Frequency information

Neighbour cell list.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
FDD cell list	OP	<1 to maxFDDFreqList>			
>UARFCN uplink (Nu)	OP		Integer(0..16383)	[21] If IE not present, default duplex distance of 190 MHz shall be used.	
>UARFCN downlink (Nd)	MP		Integer(0 .. 16383)	[21]	
>Primary scrambling code	OP	<1 to maxFDDFreqCellList>	Primary CPICH info 10.3.6.60		
3.84 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	
1.28 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			REL-4
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	REL-4
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	REL-4
GSM Neighbour cell list	OP				
>GSM neighbour cell info	MP	<1 to maxGSMCellList>			
>>BSIC	MP				
>>BCCH ARFCN	MP				

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331 CR 2513** ⌘**rev** **-** ⌘ Current version: **6.4.0** ⌘

*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 **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Removal of the UARFCN uplink (Nu) in the informative Annex A.3	
Source: ⌘	RAN WG2	
Work item code:⌘	TEI5	***Date:*** ⌘ 17/02/2005

Category: ⌘ **A**	***Release:*** ⌘ Rel-6

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:
  Ph2 *(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)*
  Rel-7 *(Release 7)*

Reason for change: ⌘	In 10.3.6.36 Frequency info the UARFCN uplink (Nu) is optional IE and when it is not present the semantics description defines that default duplex distance defined for the operating frequency band shall be used as defined in TS25.101 However, in annex A.3 it is stated that default duplex distance of 190MHz should be used.
Summary of change:⌘	As the semantic part of the UARFCN uplink (Nu) is incorrect and the IE is not needed in annex A.3, the UARFCN uplink (Nu) IE field is removed completely from informative annex A.3
Consequences if not approved: ⌘	The normative and informative part are contradicting. Thus specification is unclear.

Clauses affected: ⌘	Annex A.3.

	Y	N		
Other specs ⌘		X	Other core specifications ⌘	
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.

A.3 Frequency information

Neighbour cell list.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
FDD cell list	OP	<1 to maxFDDFreqList>			
>UARFCN uplink (Nu)	~~OP~~		~~Integer(0..16383)~~	~~[21] If IE not present, default duplex distance of 190 MHz shall be used.~~	
>UARFCN downlink (Nd)	MP		Integer(0 .. 16383)	[21]	
>Primary scrambling code	OP	<1 to maxFDDFreqCellList>	Primary CPICH info 10.3.6.60		
3.84 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	
1.28 Mcps TDD cell list	OP	<1 to maxTDDFreqList>			REL-4
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[22]	REL-4
>Cell parameters ID	OP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in [32].	REL-4
GSM Neighbour cell list	OP				
>GSM neighbour cell info	MP	<1 to maxGSMCellList>			
>>BSIC	MP				
>>BCCH ARFCN	MP				

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331 CR 2514** ⌘ **rev 1** ⌘ Current version: **5.11.0** ⌘

*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 X** Radio Access Network **X** Core Network ☐

Title: ⌘	Correction on PRACH selection	
Source: ⌘	RAN WG2	
Work item code: ⌘	TEI5	**Date:** ⌘ 31/Jan/2005
Category: ⌘ **F**		**Release:** ⌘ Rel-5

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:
Ph2 (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)
Rel-7 (Release 7)

Reason for change: ⌘	Results of the transmission power margin calculation for TFs with equal TTI in all PRACHs can vary, since some parameters used in the calculation are specific to each PRACH configured in the system information. However the current specification doesn't take the fact into acount. It was thought in RAN2#45bis meeting that in practice there is no use in configuring different parameters for the same TTI duration. (See R2-050094 for details.)
Summary of change: ⌘	**Implementation of this CR by a R99/Rel4 UE will not cause compatibility issues.** It is proposed to add a note stating that the UTRAN should make sure that the margin calculation for the same TTI in all PRACHs will not make different results.
Consequences if not approved: ⌘	UE behaviour is unspecified in the case that results from the transmission power calculation are different for TFs with equal TTI duration. **Isolated impact analysis:** This CR has isolated impact on the UTRAN behaviour as to how it configures parameters used in the power margin calculation in PRACH selection.

Clauses affected: ⌘	8.5.18.1	

	Y	N		
Other specs ⌘		X	Other core specifications ⌘	
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.

8.5.17 PRACH selection (only for reference)

For this version of the specification, when a UE selects a cell, the uplink frequency to be used for the initial PRACH transmission shall have a default duplex frequency spacing offset from the downlink frequency that the cell was selected on. The default duplex frequency separation to be used by the UE is specified in [35] (for FDD only).

> NOTE: The PRACH selection scheme assumes that all PRACHs configured in System Information Block type 5, System Information Block type 5bis and System Information Block type 6 support all (implicitly or explicitly) configurable RLC sizes of the cell, i.e. at least the transport formats corresponding to a single transport block of each applicable RLC size of the cell must be defined for each PRACH.

The UE shall select a "PRACH system information" according to the following rule. The UE shall:

1> select a "PRACH system information" from the ones indicated in the IE "PRACH system information list" in System Information Block type 5 or in System Information Block type 5bis (applicable in Idle Mode and Connected Mode) or System Information Block type 6 (applicable in Connected Mode only), as follows:

2> if in connected mode and System Information Block type 6 is defined and includes PRACH info:

3> compile a list of candidate PRACHs that consists of the PRACH system information listed in System Information Block 6, in the order of appearance as in System Information Block 6.

2>otherwise:

3> compile a list of candidate PRACHs that consists of the PRACH system information listed in System Information Block 5 or in System Information Block 5bis, in the order of appearance as in System Information Block 5 or in System Information Block 5bis, respectively.

2> in FDD:

3> perform RACH TTI selection as specified in subclause 8.5.18.1.

2> in 1.28 Mcps TDD:

3> perform RACH TTI selection according to subclause 8.5.18.2.

2> remove from the list of candidate PRACHs those PRACHs that have a TTI length different from the selected value;

2> select a PRACH randomly from the list of candidate PRACHs as follows:

"Index of selected PRACH" = floor (rand * K)

where K is equal to the number of candidate PRACH system informations, "rand" is a random number uniformly distributed in the range $0 \leq rand < 1$ and "floor" refers to rounding down to nearest integer. The candidate PRACH system informations shall be indexed from 0 to K-1. The random number generator is left to implementation. The scheme shall be implemented such that one of the available PRACH system informations is randomly selected with uniform probability. At start-up of the random number generator in the UE the seed shall be dependent on the IMSI of the UE or time, thereby avoiding that all UEs select the same RACH;

2> use the TFCS of the selected PRACH when performing TFC selection (see [15]);

2> reselect the PRACH system information when a new cell is selected. RACH reselection may also be performed after each transmission of a Transport Block Set on RACH.

1> for emergency call, the UE is allowed to select any of the available PRACH system informations.

After selecting a PRACH system information, the RRC in the UE shall configure the MAC and the physical layer for the RACH access according to the parameters included in the selected "PRACH system information" IE.

8.5.18 Selection of RACH TTI

8.5.18.1 FDD

In FDD mode, a RACH may employ either 10 or 20 ms TTI. The supported TTI is indicated as a semi-static parameter of the RACH Transport Format in system information. The UE shall select an appropriate TTI length from the RACHs included in the list of candidate PRACH(s) according to the following rule.

The UE shall:

1> if only RACHs with one particular TTI length are included in the list of candidate PRACH(s):

2> select this TTI length and proceed as specified in subclause 8.5.17.

1> if both PRACHs with 10ms and 20ms TTI lengths are included in the list of candidate PRACH(s):

2> perform TTI selection as follows:

3> when the UE calculates the initial preamble transmit power ("Preamble_Initial_Power") as specified in subclause 8.5.7:

4> select a TF to be employed for calculation of a transmit power margin as follows:

5> from the TFs supported by all candidate PRACHs keep those which correspond to a single transport block of all configured RLC sizes (i.e., in idle mode, the RLC size applicable for RB0, in connected mode, the RLC sizes configured with explicit "RB mapping info"). If more than a single TF remain applicable, the UE may select any of these. Preferably the UE should select the TF which is intended to be used at the next transmission or, if such information is not available, the TF corresponding to the largest configured RLC size.

4> calculate a transmit power margin,

$$\text{Margin} = \{\min(\text{Maximum allowed UL tx power, P\_MAX}) - \max(\text{Preamble\_Initial\_Power},$$
$$\text{Preamble\_Initial\_Power} + \Delta\text{Pp-m} + 10*\log_{10}(1 + (\beta_d/\beta_c)^2))\}$$

where "Maximum allowed UL tx power" is the maximum allowed uplink transmit power indicated in system information (in dBm), and P_MAX is the maximum RF output power of the UE (dBm). The margin shall be calculated for the gain factors β_d and β_c of the TF selected in the step above, using 10ms TTI length.

NOTE 1: the expression Preamble_Initial_Power + ΔPp-m + 10*$\log_{10}$(1 + (β_d/β_c)^2) represents the total RACH message power if the message would be sent after the initial preamble.

NOTE 2: For all PRACHs with the same TTI the UTRAN should set each of the IEs "Primary CPICH TX power", "Constant value" to the same value, and within these PRACH configurations, the UTRAN should, for all TFs including a single TB, set each of the IEs "Gain Factor β_c", "Gain Factor β_d" and "Power offset P p-m" to the same value. If these guidelines are not followed, the UE behaviour is unspecified.

3> if the resulting "Margin" value is less than 6 dB:

4> select RACH with 20 ms TTI, and proceed as specified in subclause 8.5.17.

3> otherwise, if the last L1 message transmission on PRACH failed (see [15]):

4> the UE may select RACH with 20ms TTI length and proceed as specified in subclause 8.5.17.

3> otherwise:

4> select RACH with 10ms TTI length and proceed as specified in subclause 8.5.17.

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.331 CR 2515** ⌘ **rev 1** ⌘ Current version: **6.4.0** ⌘

*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 **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Correction on PRACH selection	
Source: ⌘	RAN WG2	
Work item code: ⌘	TEI5	**Date:** ⌘ 31/Jan/2005
Category: ⌘ **A**	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.	**Release:** ⌘ Rel-6 Use *one* of the following releases: Ph2 (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) Rel-7 (Release 7)

Reason for change: ⌘	Results of the transmission power margin calculation for TFs with equal TTI in all PRACHs can vary, since some parameters used in the calculation are specific to each PRACH configured in the system information. However the current specification doesn't take the fact into acount. It was thought in RAN2#45bis meeting that in practice there is no use in configuring different parameters for the same TTI duration. (See R2-050094 for details.)
Summary of change: ⌘	**Implementation of this CR by a R99/Rel4 UE will not cause compatibility issues.** It is proposed to add a note stating that the UTRAN should make sure that the margin calculation for the same TTI in all PRACHs will not make different results.
Consequences if not approved: ⌘	UE behaviour is unspecified in the case that results from the transmission power calculation are different for TFs with equal TTI duration.

Clauses affected: ⌘	8.5.18.1

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
		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.

8.5.17 PRACH selection (only for reference)

For this version of the specification, when a UE selects a cell, the uplink frequency to be used for the initial PRACH transmission shall have a default duplex frequency spacing offset from the downlink frequency that the cell was selected on. The default duplex frequency separation to be used by the UE is specified in [35] (for FDD only).

NOTE: The PRACH selection scheme assumes that all PRACHs configured in System Information Block type 5, System Information Block type 5bis and System Information Block type 6 support all (implicitly or explicitly) configurable RLC sizes of the cell, i.e. at least the transport formats corresponding to a single transport block of each applicable RLC size of the cell must be defined for each PRACH.

The UE shall select a "PRACH system information" according to the following rule. The UE shall:

1> select a "PRACH system information" from the ones indicated in the IE "PRACH system information list" in System Information Block type 5 or in System Information Block type 5bis (applicable in Idle Mode and Connected Mode) or System Information Block type 6 (applicable in Connected Mode only), as follows:

2> if in connected mode and System Information Block type 6 is defined and includes PRACH info:

3> compile a list of candidate PRACHs that consists of the PRACH system information listed in System Information Block 6, in the order of appearance as in System Information Block 6.

2> otherwise:

3> compile a list of candidate PRACHs that consists of the PRACH system information listed in System Information Block 5 or in System Information Block 5bis, in the order of appearance as in System Information Block 5 or in System Information Block 5bis, respectively.

2> in FDD:

3> perform RACH TTI selection as specified in subclause 8.5.18.1.

2> in 1.28 Mcps TDD:

3> perform RACH TTI selection according to subclause 8.5.18.2.

2> remove from the list of candidate PRACHs those PRACHs that have a TTI length different from the selected value;

2> select a PRACH randomly from the list of candidate PRACHs as follows:

"Index of selected PRACH" = floor (rand * K)

where K is equal to the number of candidate PRACH system informations, "rand" is a random number uniformly distributed in the range $0 \leq rand < 1$ and "floor" refers to rounding down to nearest integer. The candidate PRACH system informations shall be indexed from 0 to K-1. The random number generator is left to implementation. The scheme shall be implemented such that one of the available PRACH system informations is randomly selected with uniform probability. At start-up of the random number generator in the UE the seed shall be dependent on the IMSI of the UE or time, thereby avoiding that all UEs select the same RACH;

2> use the TFCS of the selected PRACH when performing TFC selection (see [15]);

2> reselect the PRACH system information when a new cell is selected. RACH reselection may also be performed after each transmission of a Transport Block Set on RACH.

1> for emergency call, the UE is allowed to select any of the available PRACH system informations.

After selecting a PRACH system information, the RRC in the UE shall configure the MAC and the physical layer for the RACH access according to the parameters included in the selected "PRACH system information" IE.

8.5.18   Selection of RACH TTI

8.5.18.1   FDD

In FDD mode, a RACH may employ either 10 or 20 ms TTI. The supported TTI is indicated as a semi-static parameter of the RACH Transport Format in system information. The UE shall select an appropriate TTI length from the RACHs included in the list of candidate PRACH(s) according to the following rule.

The UE shall:

1> if only RACHs with one particular TTI length are included in the list of candidate PRACH(s):

2> select this TTI length and proceed as specified in subclause 8.5.17.

1> if both PRACHs with 10ms and 20ms TTI lengths are included in the list of candidate PRACH(s):

2> perform TTI selection as follows:

3> when the UE calculates the initial preamble transmit power ("Preamble_Initial_Power") as specified in subclause 8.5.7:

4> select a TF to be employed for calculation of a transmit power margin as follows:

5> from the TFs supported by all candidate PRACHs keep those which correspond to a single transport block of all configured RLC sizes (i.e., in idle mode, the RLC size applicable for RB0, in connected mode, the RLC sizes configured with explicit "RB mapping info"). If more than a single TF remain applicable, the UE may select any of these. Preferably the UE should select the TF which is intended to be used at the next transmission or, if such information is not available, the TF corresponding to the largest configured RLC size.

4> calculate a transmit power margin,

$$\text{Margin} = \{\min(\text{Maximum allowed UL tx power}, \text{P\_MAX}) - \max(\text{Preamble\_Initial\_Power},$$
$$\text{Preamble\_Initial\_Power} + \Delta\text{Pp-m} + 10{*}\log_{10}(1 + (\beta_d/\beta_c)^2))\}$$

where "Maximum allowed UL tx power" is the maximum allowed uplink transmit power indicated in system information (in dBm), and P_MAX is the maximum RF output power of the UE (dBm). The margin shall be calculated for the gain factors β_d and β_c of the TF selected in the step above, using 10ms TTI length.

NOTE 1:   the expression Preamble_Initial_Power + ΔPp-m + 10*$\log_{10}(1 + (\beta_d/\beta_c)^2)$ represents the total RACH message power if the message would be sent after the initial preamble.

NOTE 2:   For all PRACHs with the same TTI the UTRAN should set each of the IEs "Primary CPICH TX power", "Constant value" to the same value, and within these PRACH configurations, the UTRAN should, for all TFs including a single TB, set each of the IEs "Gain Factor β_c", "Gain Factor β_d" and "Power offset P p-m" to the same value. If these guidelines are not followed, the UE behaviour is unspecified.

3> if the resulting "Margin" value is less than 6 dB:

4> select RACH with 20 ms TTI, and proceed as specified in subclause 8.5.17.

3> otherwise, if the last L1 message transmission on PRACH failed (see [15]):

4> the UE may select RACH with 20ms TTI length and proceed as specified in subclause 8.5.17.

3> otherwise:

4> select RACH with 10ms TTI length and proceed as specified in subclause 8.5.17.

CR-Form-v7.1

CHANGE REQUEST

⌘   **25.331 CR 2520**   ⌘**rev   -**   ⌘   Current version: **5.11.0** ⌘

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 **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Unsupported RLC mode reconfigurations	

Source: ⌘	RAN WG2

Work item code:⌘	TEI5	***Date:*** ⌘	14/02/2005

Category: ⌘	**F**	***Release:*** ⌘	Rel-5
	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:* *Ph2* *(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)* *Rel-7* *(Release 7)*

Reason for change: ⌘	The specifications do not explicitly forbid the reconfiguration of RLC from AM to UM, however, it is not always clear what the UE behaviour should be in such cases. There is no security handling in section 8.6.4.5 "RB information to reconfigure", while there are extensive security procedures in section 8.6.4.3 "RB information to setup". Since the COUNT-C is affected by a change of the RLC mode, it seems obvious that the security impact of such a reconfiguration should be specified to avoid interoperability problems.
Summary of change:⌘	The possibility to reconfigure the RLC mode is removed by adding a note stating that the UE behaviour is unspecified when the RLC mode of an existing radio bearer is modified. **Implementation of this CR by a R99/Rel4 UE will not cause compatibility issues.**
Consequences if ⌘ ***not approved:***	UEs may be forced to implement a reconfiguration that has no useful application.

Clauses affected: ⌘	8.6.4.9

		Y	N	
Other specs ⌘ ***affected:***			X	Other core specifications ⌘
			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.

[…]

8.6.4.9 RLC Info

Upon reception of the IE "RLC Info", the UE shall:

1> configure the transmitting and receiving RLC entities in the UE for that radio bearer accordingly;

1> if the IE "Polling info" is present in the IE "RLC info":

2> for each present IE in the IE "Polling info":

3> configure RLC to use the corresponding function according to the value of the IE.

2> for each absent IE in the IE "Polling info":

3> configure RLC to not use the corresponding function.

1> if the IE "Polling info" is absent:

2> configure RLC to not use the polling functionality.

1> if the IE "Downlink RLC STATUS info" is present in the IE "RLC info" (this IE is present for AM RLC):

2> for each present IE in the IE "Downlink RLC STATUS info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Downlink RLC STATUS info":

3> configure RLC to not use the corresponding function.

1> if the IE "Transmission RLC discard" is present:

2> configure the discard procedure in RLC according to the IE "Transmission RLC discard"

1> if the IE "Transmission RLC discard" is absent (only possible for TM RLC and UM RLC):

2> do not configure SDU discard in RLC.

1> if the IE "Downlink RLC mode" is present and is set to "AM RLC":

2> if IE "DL RLC PDU size" is not present:

3> determining the downlink RLC PDU size will be handled at RLC level as described in [16], without any configuration from RRC.

NOTE: The case where this mandatory IE is not present is meant to handle the interaction with a network using an earlier release of the specification.

2> else, if the IE "DL RLC PDU size" is present and no downlink RLC PDU size is currently set in the RLC entity:

3> configure the corresponding RLC entity with the downlink RLC PDU size.

2> else, if the IE "DL RLC PDU size" is present and its value is different from the one currently set in the RLC entity:

NOTE: The downlink RLC PDU size set in the RLC entity can either be explicitly configured or, in case no explicit configuration is provided, derived by the first received RLC PDU [16].

3> if the IE "one sided RLC re-establishment" is set to TRUE:

4> re-establish the receiving side of the corresponding RLC entity.

3> else:

4> re-establish the corresponding RLC entity.

3> configure the corresponding RLC entity with the new downlink RLC PDU size;

3> if the IE "Status" in the variable CIPHERING_STATUS of the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" for this radio bearer is set to "Started":

4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:

5> if only the receiving side of the RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

5> if the whole RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

4> if the RLC re-establishment is caused by a reconfiguration message:

5> if only the receiving side of the RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

5> if the whole RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

1> if the IE "Downlink RLC mode" is present and is set to "UM RLC":

2> if the IE "DL UM RLC LI size" is not present:

3> configure the corresponding RLC entity with an LI size of 7 bits;

NOTE: The case where this mandatory IE is not present is meant to handle the interaction with a network using an earlier release of the specification.

2> else:

3> configure the corresponding RLC entity with the LI size indicated in the IE "DL UM RLC LI size".

NOTE: If the "Uplink RLC mode" or the "Downlink RLC mode" of an existing radio bearer is modified by a reconfiguration message, the UE behaviour is unspecified.

[…]

CR-Form-v7.1

CHANGE REQUEST

⌘   **25.331 CR 2521** ⌘ **rev** **-** ⌘ Current version: **6.4.0** ⌘

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 **X** Radio Access Network **X** Core Network ☐

Title: ⌘	Unsupported RLC mode reconfigurations	
Source: ⌘	RAN WG2	
Work item code:⌘	TEI5	*Date:* ⌘ 14/02/2005

Category: ⌘ **A**	*Release:* ⌘ Rel-6

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:
 Ph2 (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)
 Rel-7 (Release 7)

Reason for change: ⌘	The specifications do not explicitly forbid the reconfiguration of RLC from AM to UM, however, it is not always clear what the UE behaviour should be in such cases. There is no security handling in section 8.6.4.5 "RB information to reconfigure", while there are extensive security procedures in section 8.6.4.3 "RB information to setup". Since the COUNT-C is affected by a change of the RLC mode, it seems obvious that the security impact of such a reconfiguration should be specified to avoid interoperability problems.
Summary of change:⌘	The possibility to reconfigure the RLC mode is removed by adding a note stating that the UE behaviour is unspecified when the RLC mode of an existing radio bearer is modified. **Implementation of this CR by a R99/Rel4 UE will not cause compatibility issues.**
Consequences if ⌘ *not approved:*	UEs may be forced to implement a reconfiguration that has no useful application.

Clauses affected: ⌘	8.6.4.9

		Y	N	
Other specs ⌘ *affected:*			X	Other core specifications ⌘
			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.

[…]

8.6.4.9 RLC Info

Upon reception of the IE "RLC Info", the UE shall:

1> configure the transmitting and receiving RLC entities in the UE for that radio bearer accordingly;

1> if the IE "Polling info" is present in the IE "RLC info":

2> for each present IE in the IE "Polling info":

3> configure RLC to use the corresponding function according to the value of the IE.

2> for each absent IE in the IE "Polling info":

3> configure RLC to not use the corresponding function.

1> if the IE "Polling info" is absent:

2> configure RLC to not use the polling functionality.

1> if the IE "Downlink RLC STATUS info" is present in the IE "RLC info" (this IE is present for AM RLC):

2> for each present IE in the IE "Downlink RLC STATUS info":

3> configure RLC to use the corresponding function according to value of the IE.

2> for each absent IE in the IE "Downlink RLC STATUS info":

3> configure RLC to not use the corresponding function.

1> if the IE "Transmission RLC discard" is present:

2> configure the discard procedure in RLC according to the IE "Transmission RLC discard"

1> if the IE "Transmission RLC discard" is absent (only possible for TM RLC and UM RLC):

2> do not configure SDU discard in RLC.

1> if the IE "Downlink RLC mode" is present and is set to "AM RLC":

2> if IE "DL RLC PDU size" is not present:

3> determining the downlink RLC PDU size will be handled at RLC level as described in [16], without any configuration from RRC.

NOTE: The case where this mandatory IE is not present is meant to handle the interaction with a network using an earlier release of the specification.

2> else, if the IE "DL RLC PDU size" is present and no downlink RLC PDU size is currently set in the RLC entity:

3> configure the corresponding RLC entity with the downlink RLC PDU size.

2> else, if the IE "DL RLC PDU size" is present and its value is different from the one currently set in the RLC entity:

NOTE: The downlink RLC PDU size set in the RLC entity can either be explicitly configured or, in case no explicit configuration is provided, derived by the first received RLC PDU [16].

3> if the IE "one sided RLC re-establishment" is set to TRUE:

4> re-establish the receiving side of the corresponding RLC entity.

3> else:

4> re-establish the corresponding RLC entity.

3> configure the corresponding RLC entity with the new downlink RLC PDU size;

3> if the IE "Status" in the variable CIPHERING_STATUS of the CN domain as indicated in the IE "CN domain identity" in the IE "RAB info" for this radio bearer is set to "Started":

4> if the RLC re-establishment is caused by a CELL UPDATE CONFIRM:

5> if only the receiving side of the RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

5> if the whole RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" included in the latest transmitted CELL UPDATE message for this CN domain.

4> if the RLC re-establishment is caused by a reconfiguration message:

5> if only the receiving side of the RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

5> if the whole RLC entity was re-established:

6> set the HFN values for the corresponding RLC entity in uplink and downlink equal to the value of the IE "START" that will be included in the reconfiguration complete message for this CN domain.

1> if the IE "Downlink RLC mode" is present and is set to "UM RLC":

2> if the IE "DL UM RLC LI size" is not present:

3> configure the corresponding RLC entity with an LI size of 7 bits;

NOTE: The case where this mandatory IE is not present is meant to handle the interaction with a network using an earlier release of the specification.

2> else:

3> configure the corresponding RLC entity with the LI size indicated in the IE "DL UM RLC LI size".

NOTE: If the "Uplink RLC mode" or the "Downlink RLC mode" of an existing radio bearer is modified by a reconfiguration message, the UE behaviour is unspecified.

[…]

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.331** CR **2522** | ⌘**rev** | **-** | ⌘ | Current version: | **5.b.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 **X** Radio Access Network ☐ Core Network ☐

Title: ⌘	Correction to Inter RAT cell info indication	
Source: ⌘	RAN WG2	
Work item code:⌘	TEI5	*Date:* ⌘ 15/02/2005

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: ⌘	It is incorrectly specified that the value of the IE "Inter-RAT cell info indication" shall be included in the IE "Inter-RAT measured results list"
Summary of change:⌘	The IE "Inter-RAT cell info indication" shall be included in the MEASUREMENT REPORT message
Consequences if not approved: ⌘	The error remains in the specification

Clauses affected: ⌘	8.4.2.2

		Y	N	
Other specs affected:	⌘		X	Other core specifications ⌘
			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.

8.4.2.2 Initiation

In CELL_DCH state, the UE shall:

1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are met for any ongoing measurements that are being performed in the UE.

In CELL_FACH state, the UE shall:

1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are met for any ongoing traffic volume measurement or UE positioning measurement that is being performed in the UE.

In TDD, if the Radio Bearer associated with the MEASUREMENT_IDENTITY fulfilling the reporting criteria for an ongoing traffic volume measurement is mapped on transport channel of type USCH, the UE shall:

1> initiate the "PUSCH CAPACITY REQUEST" procedure instead of transmitting a MEASUREMENT REPORT (TDD Only).

In CELL_PCH or URA_PCH state, the UE shall:

1> first perform the cell update procedure according to subclause 8.3.1, using the cause "uplink data transmission", in order to transit to CELL_FACH state; and then

1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are fulfilled for any ongoing UE positioning measurement which is being performed in the UE.

The reporting criteria are fulfilled if either:

- a periodic MEASUREMENT REPORT message shall be sent according to the IE "Periodical Reporting Criteria"; or

- an event in stored IE "Measurement reporting criteria" was triggered. Events and triggering of reports for different measurement types are described in detail in clause 14.

For the measurement, which triggered the MEASUREMENT REPORT message, the UE shall:

1> set the IE "measurement identity" to the measurement identity, which is associated with that measurement in variable MEASUREMENT_IDENTITY;

1> set the IE "measured results" to include measurements according to the IE "reporting quantity" of that measurement stored in variable MEASUREMENT_IDENTITY; and

    2> if all the reporting quantities are set to "false":

        3> not set the IE "measured results".

1> set the IE "Measured results" in the IE "Additional measured results" according to the IE "reporting quantity" for all measurements associated with the measurement identities included in the "Additional measurements list" stored in variable MEASUREMENT_IDENTITY of the measurement that triggered the measurement report; and

    2> if one or more additional measured results are to be included:

        3> include only the available additional measured results, and sort them in ascending order according to their IE "measurement identity" in the MEASUREMENT REPORT message.

1> if the MEASUREMENT REPORT message was triggered by an event (i.e. not a periodical report):

    2> set the IE "Event results" according to the event that triggered the report.

1> if the observed time difference for one or more GSM cells is included in the MEASUREMENT REPORT message:

2> set the IE "GSM OTD reference cell" to the primary CPICH info of the active set cell that was used as reference for the measurement.

1> if the IE "Inter-RAT measured result list" or the IE "Inter-RAT measurements event results" is included in the measurement report:

2> if the "Inter-RAT cell info indication" status is marked "present" in the variable CELL_INFO_LIST, include the value of the IE "Inter-RAT cell info indication" in the ~~IE "Inter-RAT measured results list"~~ MEASUREMENT REPORT message.

The UE shall:

1> transmit the MEASUREMENT REPORT message on the uplink DCCH using either AM or UM RLC according to the stored IE "measurement reporting mode" associated with the measurement identity that triggered the report.

When the MEASUREMENT REPORT message has been submitted to lower layers for transmission:

1> the procedure ends.

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.331** CR **2523** | ⌘**rev** | **-** | ⌘ | Current version: | **6.4.0** | ⌘ |

*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 [**X**] Radio Access Network [ ] Core Network [ ]

Title: ⌘	Correction to Inter RAT cell info indication	
Source: ⌘	RAN WG2	
Work item code: ⌘	TEI5	***Date:*** ⌘ 15/02/2005
Category: ⌘ **A**		***Release:*** ⌘ REL-6

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: ⌘	It is incorrectly specified that the value of the IE "Inter-RAT cell info indication" shall be included in the IE "Inter-RAT measured results list"
Summary of change: ⌘	The IE "Inter-RAT cell info indication" shall be included in the MEASUREMENT REPORT message
Consequences if not approved: ⌘	The error remains in the specification

Clauses affected: ⌘	8.4.2.2

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
		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.

8.4.2.2　　　Initiation

In CELL_DCH state, the UE shall:

　　1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are met for any ongoing measurements that are being performed in the UE.

In CELL_FACH state, the UE shall:

　　1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are met for any ongoing traffic volume measurement or UE positioning measurement that is being performed in the UE.

In TDD, if the Radio Bearer associated with the MEASUREMENT_IDENTITY fulfilling the reporting criteria for an ongoing traffic volume measurement is mapped on transport channel of type USCH, the UE shall:

　　1> initiate the "PUSCH CAPACITY REQUEST" procedure instead of transmitting a MEASUREMENT REPORT (TDD Only).

In CELL_PCH or URA_PCH state, the UE shall:

　　1> first perform the cell update procedure according to subclause 8.3.1, using the cause "uplink data transmission", in order to transit to CELL_FACH state; and then

　　1> transmit a MEASUREMENT REPORT message on the uplink DCCH when the reporting criteria stored in variable MEASUREMENT_IDENTITY are fulfilled for any ongoing UE positioning measurement which is being performed in the UE.

The reporting criteria are fulfilled if either:

　　- a periodic MEASUREMENT REPORT message shall be sent according to the IE "Periodical Reporting Criteria"; or

　　- an event in stored IE "Measurement reporting criteria" was triggered. Events and triggering of reports for different measurement types are described in detail in clause 14.

For the measurement, which triggered the MEASUREMENT REPORT message, the UE shall:

　　1> set the IE "measurement identity" to the measurement identity, which is associated with that measurement in variable MEASUREMENT_IDENTITY;

　　1> set the IE "measured results" to include measurements according to the IE "reporting quantity" of that measurement stored in variable MEASUREMENT_IDENTITY; and

　　　　2> if all the reporting quantities are set to "false":

　　　　　　3> not set the IE "measured results".

　　1> set the IE "Measured results" in the IE "Additional measured results" according to the IE "reporting quantity" for all measurements associated with the measurement identities included in the "Additional measurements list" stored in variable MEASUREMENT_IDENTITY of the measurement that triggered the measurement report; and

　　　　2> if one or more additional measured results are to be included:

　　　　　　3> include only the available additional measured results, and sort them in ascending order according to their IE "measurement identity" in the MEASUREMENT REPORT message.

　　1> if the MEASUREMENT REPORT message was triggered by an event (i.e. not a periodical report):

　　　　2> set the IE "Event results" according to the event that triggered the report.

　　1> if the observed time difference for one or more GSM cells is included in the MEASUREMENT REPORT message:

2> set the IE "GSM OTD reference cell" to the primary CPICH info of the active set cell that was used as reference for the measurement.

1> if the IE Inter-RAT measured result list or the IE Inter-RAT measurements event results is included in the measurement report:

2> if the "Inter-RAT cell info indication" status is marked "present" in the variable CELL_INFO_LIST, include the value of the IE "Inter-RAT cell info indication" in the ~~IE "Inter-RAT measured results list"~~ MEASUREMENT REPORT message.

The UE shall:

1> transmit the MEASUREMENT REPORT message on the uplink DCCH using either AM or UM RLC according to the stored IE "measurement reporting mode" associated with the measurement identity that triggered the report.

When the MEASUREMENT REPORT message has been submitted to lower layers for transmission:

1> the procedure ends.