TSG RAN Meeting #28   **RP-050217**
Quebec, Canada, 01 - 03 June 2005
Title   CRs (Rel-5 & Rel-6 cat. A) to TS 25.413, TS25.423, TS 25.450, TS 25.453 and
                                 TR 25.931

Source   TSG RAN WG3
Agenda Item   7.4.5

RAN3 Tdoc	Spec	CR	Rev	Cat	curr. Vers.	new Vers.	Rel	Work item	Title
R3-050523	25.413	748		F	5.11.0	5.12.0	Rel-5	TEI5	Correction of CR729
R3-050524	25.413	749		A	6.5.0	6.6.0	Rel-6	TEI5	Correction of CR729
R3-050601	25.413	762		F	5.11.0	5.12.0	Rel-5	TEI5	Correction of Cell Load Information Group
R3-050602	25.413	763		A	6.5.0	6.6.0	Rel-6	TEI5	Correction of Cell Load Information Group
R3-050690	25.423	1045	1	F	5.13.0	5.14.0	Rel-5	HSDPA-Iublur	Correction to the RL Reconf for serving HS-DSCH cell change
R3-050691	25.423	1046	1	A	6.5.0	6.6.0	Rel-6	HSDPA-Iublur	Correction to the RL Reconf for serving HS-DSCH cell change
R3-050692	25.931	26	1	F	5.1.0	5.2.0	Rel-5	HSDPA-Iublur	HS-DSCH Mobility procedures
R3-050693	25.931	27	1	A	6.1.0	6.2.0	Rel-6	HSDPA-Iublur	HS-DSCH Mobility procedures
R3-050717	25.450	4		F	5.1.0	5.2.0	Rel-5	TEI5	Correction on use of SCCP connection for information exchange
R3-050718	25.450	5		A	6.0.0	6.1.0	Rel-6	TEI5	Correction on use of SCCP connection for information exchange
R3-050719	25.453	81	1	F	5.10.0	5.11.0	Rel-5	TEI5	Correction of deletion of Information Exchange Context
R3-050826	25.453	82	2	A	6.8.0	6.9.0	Rel-6	TEI5	Correction of deletion of Information Exchange Context

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.413 CR 748** ⌘**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 ☐ Radio Access Network **X** Core Network **X**

Title: ⌘	Correction of CR729	
Source: ⌘	RAN3	
Work item code:⌘	TEI5	***Date:*** ⌘ 27/04/2005

Category: ⌘ **F**

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.

Release: ⌘ Rel-5

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: ⌘	CR729 (agreed at RAN#46) introduced text stating how the RNC would handle received DIRECT TRANSFER messages for UL and DL during the Relocation Preparation procedure. However received DIRECT TRANSFER messages are only requires RNC handling in the DL so the text text introduced by CR729 needs to be ammended. The following correction is proposed: "If during the Relocation Preparation procedure the source RNC receives a DIRECT TRANSFER message it shall be handled normally ~~in the uplink. In the downlink, it shall be handled normally~~ up to the anticipated limit according to section 14.12.4.2 [10]."
Summary of change:⌘	The procedure text introduced by CR729 is corrected. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact towards the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated because it only affects the Relocation Preparation procedure.
Consequences if ⌘	The misleading procedure text will remain.

not approved:			

Clauses affected:	⌘	8.6			

		Y	**N**				
Other specs affected:	⌘	**X**		Other core specifications	⌘	25.413 CR749 Rel6	
			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.
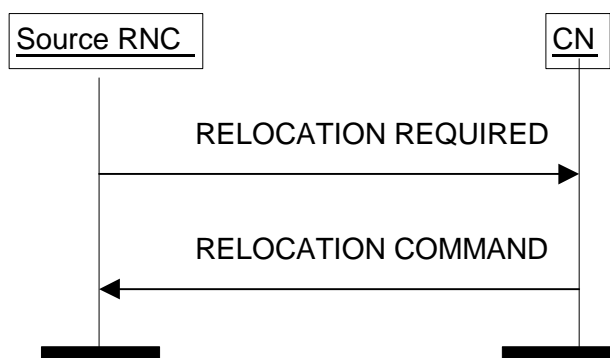
8.6 Relocation Preparation

8.6.1 General

The purpose of the Relocation Preparation procedure is to prepare relocation of SRNS either with involving the UE or without involving the UE. The relocation procedure shall be co-ordinated over all Iu signalling connections existing for the UE in order to allow Relocation co-ordination in the target RNC. The procedure uses connection oriented signalling.

The source RNC shall not initiate the Relocation Preparation procedure for an Iu signalling connection if a Prepared Relocation exists in the RNC for that Iu signalling connection or if a Relocation Preparation procedure is ongoing for that Iu signalling connection.

8.6.2 Successful Operation

Figure 5: Relocation Preparation procedure. Successful operation.

The source RNC initiates the procedure by sending a RELOCATION REQUIRED message. The source RNC shall decide whether to initiate an intra-system Relocation or an inter-system handover. In case of intra-system Relocation, the source RNC shall indicate in the *Source ID* IE the RNC-ID of the source RNC and in the *Target ID* IE the RNC-ID of the target RNC. In case of inter-system handover, the source RNC shall indicate in the *Source ID* IE the Service Area Identifier and in the *Target ID* IE the cell global identity of the cell in the target system. The source RNC shall indicate the appropriate cause value for the Relocation in the *Cause* IE. Typical cause values are "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons" , "Directed Retry", "Reduce Load in Serving Cell", "Access Restricted Due to Shared Networks".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of the UE. The source RNC shall set accordingly the *Relocation Type* IE to "UE involved in relocation of SRNS" or "UE not involved in relocation of SRNS".

In case of intra-system Relocation, the source RNC shall include in the RELOCATION REQUIRED message the *Source RNC to Target RNC Transparent Container* IE. This container shall include the *Relocation Type* IE and the *Number of Iu Instances* IE containing the number of Iu signalling connections existing for the UE .

Only in case of intra-system relocation, the *Source RNC to Target RNC Transparent Container* IE shall include the *Integrity Protection Key* IE from the last received domain on which the Security Mode Control procedure has been successfully performed, and the associated *Chosen Integrity Protection Algorithm* IE that has been selected for this domain.

Only in case of intra-system relocation, the *Source RNC to Target RNC Transparent Container* IE shall include the *Ciphering Key* IE for the signalling data from the last received domain on which the Security Mode Control procedure has been successfully performed if the ciphering has been started, together with the associated *Chosen Encryption Algorithm* IE that has been selected for this domain. If the ciphering has not been started, the RNC may include the *Ciphering Key* IE and the *Chosen Encryption Algorithm* IE if they are available.

Only in case of intra-system relocation, for each domain where the Security Mode Control procedure has been successfully performed in the source RNC, the *Source RNC to Target RNC Transparent Container* IE shall include the

Chosen Encryption Algorithm IE of CS (PS respectively) user data corresponding to the ciphering alternative that has been selected for this domain. If the Security Mode Control procedure had not been successful or performed for one domain or had proposed no ciphering alternative, the *Chosen Encryption Algorithm* IE for the user data of this domain shall not be included. When both the CS and the PS user data *Chosen Encryption Algorithm* IEs are provided, they shall be the same.

This *Source RNC to Target RNC Transparent Container* IE shall include the *RRC Container* IE. If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS" and the UE is using DCH(s), DSCH(s), USCH(s) or HS-DSCH, the *Source RNC to Target RNC Transparent Container* IE shall:

- for each RAB include the RAB ID, the *CN Domain Indicator* IE and the mapping between each RAB subflow and transport channel identifier(s) over Iur, i.e. if the RAB is carried on a DCH(s), the DCH ID(s) shall be included, and when it is carried on DSCH(s), USCH(s) or HS-DSCH, the DSCH ID(s), USCH ID(s) or HS-DSCH MAC-d Flow ID respectively shall be included,

- only in the case the active SRBs in SRNC are not all mapped onto the same DCH, include the *SRB TrCH Mapping* IE containing for each SRB the SRB ID and the associated transport channel identifier over Iur, i.e. if the SRB is carried on a DCH, the DCH ID shall be included, and when it is carried on DSCH or USCH, the DSCH ID or USCH ID respectively shall be included.

If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS", the *d-RNTI* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE. If the *Relocation Type* IE is set to "UE involved in relocation of SRNS", the *Target Cell ID* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE.

In case of inter-system handover to GSM the RNC:

- shall include the *MS Classmark 2* and *MS Classmark 3* IEs received from the UE in the RELOCATION REQUIRED message to the CN.

- shall include the *Old BSS to New BSS Information* IE within the RELOCATION REQUIRED message only if the information is available. This information shall include, if available, the current traffic load in the source cell, i.e. prior to the inter-system handover attempt. This information shall also include the source cell identifier the included traffic load values correspond to. In the case the UE is using, prior to the inter-system handover attempt, radio resources of more than one cell, it is implementation specific for which cell the source RNC should report the current traffic load and the cell identifier.

When the source RNC sends the RELOCATION REQUIRED message, it shall start the timer $T_{RELOCprep.}$

When the preparation including resource allocation in the target system is ready and the CN has decided to continue the relocation of SRNS, the CN shall send a RELOCATION COMMAND message to the source RNC and the CN shall start the timer $T_{RELOCcomplete}$.

If the *Target RNC To Source RNC Transparent Container* IE or the *L3 information* IE is received by the CN from the relocation target, it shall be included in the RELOCATION COMMAND message.

The RELOCATION COMMAND message may also contain the *Inter-System Information Transparent Container* IE.

For each RAB successfully established in the target system and originating from the PS domain, the RELOCATION COMMAND message shall contain at least one pair of Iu transport address and Iu transport association to be used for the forwarding of the DL N-PDU duplicates towards the relocation target. If more than one pair of Iu transport address and Iu transport association is included, the source RNC shall select one of the pairs to be used for the forwarding of the DL N-PDU duplicates towards the relocation target. Upon reception of the RELOCATION COMMAND message from the PS domain, the source RNC shall start the timer $T_{DATAfwd.}$

The Relocation Preparation procedure is terminated in the CN by transmission of the RELOCATION COMMAND message.

If the target system (including target CN) does not support all existing RABs, the RELOCATION COMMAND message shall contain a list of RABs indicating all the RABs that are not supported by the target system. This list is contained in the *RABs to Be Released* IE. The source RNC shall use this information to avoid transferring associated contexts where applicable and may use this information e.g. to decide if to cancel the relocation or not. The resources associated with these not supported RABs shall not be released until the relocation is completed. This is in order to make a return to the old configuration possible in case of a failed or cancelled relocation.

Upon reception of the RELOCATION COMMAND message the source RNC shall stop the timer $T_{RELOCprep}$, start the timer $T_{RELOCOverall}$ and terminate the Relocation Preparation procedure. The source RNC is then defined to have a Prepared Relocation for that Iu signalling connection.

When the Relocation Preparation procedure is successfully terminated and when the source RNC is ready, the source RNC should trigger the execution of relocation of SRNS.

Interactions with other procedures:

If, after a RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating another connection oriented RANAP class 1 or class 3 procedure (except IU RELEASE COMMAND message, which shall be handled normally) via the same Iu signalling connection, the source RNC shall either:

1. cancel the Relocation Preparation procedure i.e. execute the Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of the Relocation Cancel procedure, the source RNC shall continue the initiated RANAP procedure;

   or

2. terminate the initiated RANAP procedure without any changes in UTRAN by sending the appropriate response message with the cause value "Relocation Triggered" to the CN. The source RNC shall then continue the relocation of SRNS.

If during the Relocation Preparation procedure the source RNC receives a DIRECT TRANSFER message it shall be handled normally ~~in the uplink. In the downlink, it shall be handled normally~~ up to the anticipated limit according to section 14.12.4.2 [10].

If during the Relocation Preparation procedure the source RNC receives connection oriented RANAP class 2 messages (with the exception of DIRECT TRANSFER message) it shall decide to either execute the procedure immediately or suspend it. In case the relocation is cancelled, the RNC shall resume any suspended procedures (if any).

After the Relocation Preparation procedure is successfully terminated, all RANAP messages (except IU RELEASE COMMAND message, which shall be handled normally) received via the same Iu signalling bearer shall be ignored by the source RNC.

8.6.2.1　　Successful Operation for GERAN Iu-mode

The relocation between UTRAN and GERAN Iu-mode shall be considered in the Relocation Preparation procedure as intra-system relocation from RANAP point of view.

For GERAN Iu-mode and to support Relocation towards a GERAN BSC in Iu mode the following shall apply in addition for the successful operation of the Relocation Preparation procedure:

- In case of a Relocation to GERAN Iu-mode (only for CS), the RNC shall include, if available, the *GERAN Classmark* IE within the RELOCATION REQUIRED message in those cases where the transmission of the *GERAN Classmark IE* is required, as defined in [27].

CR-Form-v7.1

CHANGE REQUEST

⌘   **25.413 CR 749**   ⌘ **rev**   **-**   ⌘   Current version: **6.5.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X**   Core Network **X**

Title: ⌘	Correction of CR729	
Source: ⌘	RAN3	
Work item code: ⌘	TEI5	***Date:*** ⌘ 27/04/2005

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: ⌘	CR729 (agreed at RAN#46) introduced text stating how the RNC would handle received DIRECT TRANSFER messages for UL and DL during the Relocation Preparation procedure. However received DIRECT TRANSFER messages are only requires RNC handling in the DL so the text text introduced by CR729 needs to be ammended. The following correction is proposed: "If during the Relocation Preparation procedure the source RNC receives a DIRECT TRANSFER message it shall be handled normally ~~in the uplink. In the downlink, it shall be handled normally~~ up to the anticipated limit according to section 14.12.4.2 [10]."
Summary of change: ⌘	The procedure text introduced by CR729 is corrected. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact towards the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated because it only affects the Relocation Preparation procedure.
Consequences if ⌘	The misleading procedure text will remain.

not approved:				

Clauses affected:	⌘	8.6			

		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	25.413 CR748 Rel5
			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.
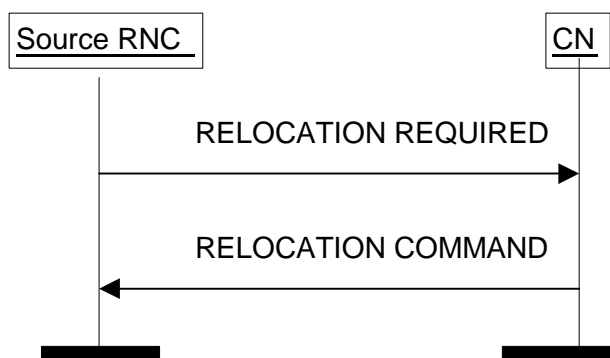
8.6 Relocation Preparation

8.6.1 General

The purpose of the Relocation Preparation procedure is to prepare relocation of SRNS either with involving the UE or without involving the UE. The relocation procedure shall be co-ordinated over all Iu signalling connections existing for the UE in order to allow Relocation co-ordination in the target RNC. The procedure uses connection oriented signalling.

The source RNC shall not initiate the Relocation Preparation procedure for an Iu signalling connection if a Prepared Relocation exists in the RNC for that Iu signalling connection or if a Relocation Preparation procedure is ongoing for that Iu signalling connection.

8.6.2 Successful Operation

Figure 5: Relocation Preparation procedure. Successful operation.

The source RNC initiates the procedure by sending a RELOCATION REQUIRED message. The source RNC shall decide whether to initiate an intra-system Relocation or an inter-system handover. In case of intra-system Relocation, the source RNC shall indicate in the *Source ID* IE the RNC-ID of the source RNC and in the *Target ID* IE the RNC-ID of the target RNC. In case of inter-system handover, the source RNC shall indicate in the *Source ID* IE the Service Area Identifier and in the *Target ID* IE the cell global identity of the cell in the target system. The source RNC shall indicate the appropriate cause value for the Relocation in the *Cause* IE. Typical cause values are "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons" , "Directed Retry", "Reduce Load in Serving Cell", "Access Restricted Due to Shared Networks".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of the UE. The source RNC shall set accordingly the *Relocation Type* IE to "UE involved in relocation of SRNS" or "UE not involved in relocation of SRNS".

In case of intra-system Relocation, the source RNC shall include in the RELOCATION REQUIRED message the *Source RNC to Target RNC Transparent Container* IE. This container shall include the *Relocation Type* IE and the *Number of Iu Instances* IE containing the number of Iu signalling connections existing for the UE .

Only in case of intra-system relocation, the *Source RNC to Target RNC Transparent Container* IE shall include the *Integrity Protection Key* IE from the last received domain on which the Security Mode Control procedure has been successfully performed, and the associated *Chosen Integrity Protection Algorithm* IE that has been selected for this domain.

Only in case of intra-system relocation, the *Source RNC to Target RNC Transparent Container* IE shall include the *Ciphering Key* IE for the signalling data from the last received domain on which the Security Mode Control procedure has been successfully performed if the ciphering has been started, together with the associated *Chosen Encryption Algorithm* IE that has been selected for this domain. If the ciphering has not been started, the RNC may include the *Ciphering Key* IE and the *Chosen Encryption Algorithm* IE if they are available.

Only in case of intra-system relocation, for each domain where the Security Mode Control procedure has been successfully performed in the source RNC, the *Source RNC to Target RNC Transparent Container* IE shall include the *Chosen Encryption Algorithm* IE of CS (PS respectively) user data corresponding to the ciphering alternative that has been selected for this domain. If the Security Mode Control procedure had not been successful or performed for one

domain or had proposed no ciphering alternative, the *Chosen Encryption Algorithm* IE for the user data of this domain shall not be included. When both the CS and the PS user data *Chosen Encryption Algorithm* IEs are provided, they shall be the same.

This *Source RNC to Target RNC Transparent Container* IE shall include the *RRC Container* IE. If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS" and the UE is using DCH(s), DSCH(s), USCH(s) or HS-DSCH, the *Source RNC to Target RNC Transparent Container* IE shall:

- for each RAB include the RAB ID, the *CN Domain Indicator* IE and the mapping between each RAB subflow and transport channel identifier(s) over Iur, i.e. if the RAB is carried on a DCH(s), the DCH ID(s) shall be included, and when it is carried on DSCH(s), USCH(s) or HS-DSCH, the DSCH ID(s), USCH ID(s) or HS-DSCH MAC-d Flow ID respectively shall be included,

- only in the case the active SRBs in SRNC are not all mapped onto the same DCH, include the *SRB TrCH Mapping* IE containing for each SRB the SRB ID and the associated transport channel identifier over Iur, i.e. if the SRB is carried on a DCH, the DCH ID shall be included, and when it is carried on DSCH or USCH, the DSCH ID or USCH ID respectively shall be included.

If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS", the *d-RNTI* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE. If the *Relocation Type* IE is set to "UE involved in relocation of SRNS", the *Target Cell ID* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE.

In case a Trace Recording Session is active in the Source RNC due to a Signalling Based Activation (see ref [37]), the *Trace Recording Session Information* IE containing information identifying the Trace Record being generated may be included in the *Source RNC to Target RNC Transparent Container* IE.

In case the UE has been linked to at least one Multicast Service, the Source RNC shall include in the *Source RNC to Target RNC Transparent Container* IE the *MBMS Linking Information* IE, if available.

In case of inter-system handover to GSM the RNC:

- shall include the *MS Classmark 2* and *MS Classmark 3* IEs received from the UE in the RELOCATION REQUIRED message to the CN.

- shall include the *Old BSS to New BSS Information* IE within the RELOCATION REQUIRED message only if the information is available. This information shall include, if available, the current traffic load in the source cell, i.e. prior to the inter-system handover attempt. This information shall also include the source cell identifier the included traffic load values correspond to. In the case the UE is using, prior to the inter-system handover attempt, radio resources of more than one cell, it is implementation specific for which cell the source RNC should report the current traffic load and the cell identifier.

When the source RNC sends the RELOCATION REQUIRED message, it shall start the timer $T_{RELOCprep}$.

When the preparation including resource allocation in the target system is ready and the CN has decided to continue the relocation of SRNS, the CN shall send a RELOCATION COMMAND message to the source RNC and the CN shall start the timer $T_{RELOCcomplete}$.

If the *Target RNC To Source RNC Transparent Container* IE or the *L3 information* IE is received by the CN from the relocation target, it shall be included in the RELOCATION COMMAND message.

The RELOCATION COMMAND message may also contain the *Inter-System Information Transparent Container* IE.

For each RAB successfully established in the target system and originating from the PS domain, the RELOCATION COMMAND message shall contain at least one pair of Iu transport address and Iu transport association to be used for the forwarding of the DL N-PDU duplicates towards the relocation target. If more than one pair of Iu transport address and Iu transport association is included, the source RNC shall select one of the pairs to be used for the forwarding of the DL N-PDU duplicates towards the relocation target. Upon reception of the RELOCATION COMMAND message from the PS domain, the source RNC shall start the timer $T_{DATAfwd}$.

The Relocation Preparation procedure is terminated in the CN by transmission of the RELOCATION COMMAND message.

If the target system (including target CN) does not support all existing RABs, the RELOCATION COMMAND message shall contain a list of RABs indicating all the RABs that are not supported by the target system. This list is contained in the *RABs to Be Released* IE. The source RNC shall use this information to avoid transferring associated

contexts where applicable and may use this information e.g. to decide if to cancel the relocation or not. The resources associated with these not supported RABs shall not be released until the relocation is completed. This is in order to make a return to the old configuration possible in case of a failed or cancelled relocation.

Upon reception of the RELOCATION COMMAND message the source RNC shall stop the timer $T_{RELOCprep}$, start the timer $T_{RELOCOverall}$ and terminate the Relocation Preparation procedure. The source RNC is then defined to have a Prepared Relocation for that Iu signalling connection.

When the Relocation Preparation procedure is successfully terminated and when the source RNC is ready, the source RNC should trigger the execution of relocation of SRNS.

Interactions with other procedures:

If, after a RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating another connection oriented RANAP class 1 or class 3 procedure (except IU RELEASE COMMAND message, which shall be handled normally) via the same Iu signalling connection, the source RNC shall either:

1. cancel the Relocation Preparation procedure i.e. execute the Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of the Relocation Cancel procedure, the source RNC shall continue the initiated RANAP procedure;

or

2. terminate the initiated RANAP procedure without any changes in UTRAN by sending the appropriate response message with the cause value "Relocation Triggered" to the CN. The source RNC shall then continue the relocation of SRNS.

If during the Relocation Preparation procedure the source RNC receives a DIRECT TRANSFER message it shall be handled normally ~~in the uplink. In the downlink, it shall be handled normally~~ up to the anticipated limit according to section 14.12.4.2 [10].

If during the Relocation Preparation procedure the source RNC receives connection oriented RANAP class 2 messages (with the exception of DIRECT TRANSFER message) it shall decide to either execute the procedure immediately or suspend it. In case the relocation is cancelled, the RNC shall resume any suspended procedures (if any).

After the Relocation Preparation procedure is successfully terminated, all RANAP messages (except IU RELEASE COMMAND message, which shall be handled normally) received via the same Iu signalling bearer shall be ignored by the source RNC.

8.6.2.1 Successful Operation for GERAN Iu-mode

The relocation between UTRAN and GERAN Iu-mode shall be considered in the Relocation Preparation procedure as intra-system relocation from RANAP point of view.

For GERAN Iu-mode and to support Relocation towards a GERAN BSC in Iu mode the following shall apply in addition for the successful operation of the Relocation Preparation procedure:

- In case of a Relocation to GERAN Iu-mode (only for CS), the RNC shall include, if available, the *GERAN Classmark* IE within the RELOCATION REQUIRED message in those cases where the transmission of the *GERAN Classmark IE* is required, as defined in [27].

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **TS25.413** CR **CR762** | ⌘**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 ☐ Radio Access Network **X** Core Network **X**

Title: ⌘	Correction of Cell load Information Group	
Source: ⌘	RAN3	
Work item code:⌘	TEI5	***Date:*** ⌘ 09/05/2005
Category: ⌘ **F**	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.	***Release:*** ⌘ REL-5 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: ⌘	Erroneous text for the interpretation of the load information received. The load information doesn't have the same meaning depending on the message where it is received.
Summary of change:⌘	Text added in the Cell Load information to interpret the load information when received depending on the message where it is received. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact towards the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated because it only affects the Relocation Preparation procedures.
Consequences if ⌘ ***not approved:***	Risk of erroneous use of the load information received when CRRM used.
Clauses affected: ⌘	9.2.1.49

		Y	**N**	
Other specs	⌘	**X**	☐	Other core specifications ⌘ TS25.413 CR763

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.

9.2.1.49   Cell Load Information

The *Cell Load Information* IE contains the load information of a specific (serving or target) cell for either the Downlink or the Uplink. If the RNC supports cell load-based inter-system handover, this information shall be understood, when available, as the current traffic load in the target cell if included in a RELOCATION PREPARATION FAILURE message, or the traffic load in the target cell assuming a successful completion of the handover in progress if included in a RELOCATION COMMAND message.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Load Information				
> Cell Capacity Class Value	M		9.2.1.50	
> Load Value	M		9.2.1.51	
> RT Load Value	O		9.2.1.52	
> NRT Load Information Value	O		9.2.1.53	

CR-Form-v7.1

CHANGE REQUEST

⌘ **TS25.413** CR **CR763** ⌘**rev** **-** ⌘ Current version: **6.5.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐ Radio Access Network **X** Core Network **X**

Title: ⌘	Correction of Cell load Information Group
Source: ⌘	RAN3
Work item code:⌘ TEI5	***Date:*** ⌘ 09/05/2005

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

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: ⌘	Erroneous text for the interpretation of the load information received. The load information doesn't have the same meaning depending on the message where it is received.
Summary of change:⌘	Text added in the Cell Load information to interpret the load information when received depending on the message where it is received. Impact assessment towards the previous version of the specification (same release): This CR has isolated impact towards the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated because it only affects the Relocation Preparation procedures.
Consequences if not approved: ⌘	Risk of erroneous use of the load information received when CRRM used.
Clauses affected: ⌘	9.2.1.49

		Y	N		
Other specs	⌘	**X**		Other core specifications	⌘ TS25.413 CR762

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.

9.2.1.49 Cell Load Information

The *Cell Load Information* IE contains the load information of a specific (serving or target) cell for either the Downlink or the Uplink. If the RNC supports cell load-based inter-system handover, this information shall be understood, when available, as the current traffic load in the target cell if included in a RELOCATION PREPARATION FAILURE message, or the traffic load in the target cell assuming a successful completion of the handover in progress if included in a RELOCATION COMMAND message.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Load Information				
> Cell Capacity Class Value	M		9.2.1.50	
> Load Value	M		9.2.1.51	
> RT Load Value	O		9.2.1.52	
> NRT Load Information Value	O		9.2.1.53	

3GPP TSG-RAN WG3 Meeting #47   *Tdoc ⌘ R3-050690*
Athens, Greece, 9th – 13th May 2005

<div style="border:1px solid;">

CR-Form-v7.1

CHANGE REQUEST

⌘   **25.423** CR **1045**   ⌘ **rev** **1** ⌘   Current version: **5.13.0** ⌘

</div>

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐ Radio Access Network **X**   Core Network ☐

Title: ⌘	Correction to the RL Reconf for serving HS-DSCH cell change.	
Source: ⌘	RAN3	
Work item code: ⌘	HSDPA-IubIur	**Date:** ⌘ 11/5/2004
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:
  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: ⌘	For the scenario of inter Node B (Intra DRNC) serving HS-DSCH cell change, the ALCAP data transport bearer need to be establish. This is because the DRNC does not have a mean to know the timing to switch the transferring of the FP frame data from old transport bearer(old serving Node B) to new transport bearer (New serving Node B) in case the Iur transport bearer is not re-established. Further, we assume that when executing the inter Node B (Intra DRNC) serving HS-DSCH cell change, only the *HS-DSCH RL ID* IE is included in the RADIO LINK RECONFIGURATION PREPARE message. This is because the HS-DSCH related information has been stored in the UE Context of the DRNC so if there is no any HS-DSCH MAC-d flow to be added/deleted/modified, only *HS-DSCH RL ID* IE is enough. However, with the current procedure text in 25.423, it has only specified that the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. In other words, the current 25.423 does not clearly specify in the RADIO LINK RECONFIGURATION READY message(for Synchronised case) and RADIO LINK RECONFIGURATION RESPONSE message (for Unsynchronised case) to include *Transport Layer Address* IE and *Binding ID* IE for SRNC to establish ALCAP data transport bearer for the case other than "HS-DSCH MAC-d flow being added" and "HS-DSCH MAC-d flow being modified" . In particular, for the case of inter Node B (Intra DRNC) serving HS-DSCH cell change.

	This could cause an IoT problem if the implementation interpret from the current procedure text that it does not have to include *Transport Layer Address* IE and *Binding ID* IE in the RADIO LINK RECONFIGURATION READY message for Inter-Node B (intra-DRNC) synchronised serving HS-DSCH cell change.
	Please note that for the intra Node B (intra DRNC) serving HS-DSCH cell change, while it is same for the inter Node B (intra DRNC) serving HS-DSCH cell change that only *HS-DSCH RL ID* IE is included in the RADIO LINK RECONFIGURATION PREPARE message, there is no need to establish the ALCAP Data Transport Bearer. For this scenario, the DRNC could possibly not include *Transport Layer Address* IE and *Binding ID* IE in RADIO LINK RECONFIGURATION READY message.
Summary of change: ⌘	In chapter 8.3.4.2 Synchronised Radio Link Reconfiguration Preparation and in chapter 8.3.7.2 Unsynchronised Radio Link Reconfiguration, the procedure text that describes the condition to include *Transport Layer Address* IE and *Binding ID* IE are added.
	Impact assessment towards the previous version of the specification (same rlease): This CR has an isolated impact with the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated, because the change affects one function namely the Radio Link Reconfiguration for serving HS-DSCH cell change.
Consequences if not approved: ⌘	The ambiguity remain in the spec and therefore may cause the implementation not to *Transport Layer Address* IE and *Binding ID* IE in relevant messages.

Clauses affected:	⌘	8.3.4.2, 8.3.7.2,		
		Y	**N**	
Other specs affected:	⌘	**X**		Other core specifications	⌘	CR1046 on TS25.423v6.5.0
			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.

/* start changed section */

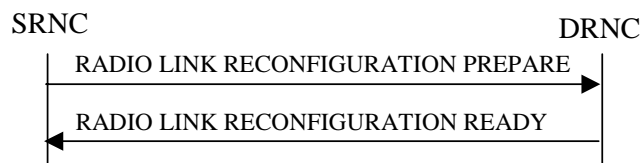## 8.3.4 Synchronised Radio Link Reconfiguration Preparation

8.3.4.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.4.2 Successful Operation

Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon receipt, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

Not affected part are not shown

Intra-DRNS Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.

- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.

- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.

- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Modification:

Not affected part are not shown

General

If the requested modifications are allowed by the DRNC and the DRNC has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCHs To Modify* IE, *DSCHs To Add* IE, [TDD - *USCHs To Modify* IE, *USCHs To Add* IE], *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or in the *RL Specific DCH Information* IEs, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the DCHs in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the combined Radio Links.

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused

by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE respectively. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH of the RL -except during compressed mode, when the δP_{curr}, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

[TDD - If the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE][1.28Mcps TDD - *DL Time Slot ISCP Info LCR* IE] is present, the DRNS should use the indicated values when deciding the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use the indicated values when deciding the Initial DL TX Power.]

/* next changed section */

8.3.7   Unsynchronised Radio Link Reconfiguration

8.3.7.1   General

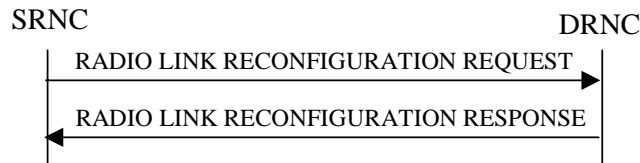The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.7.2   Successful Operation

Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon receipt, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL to be modified according to Annex A.

DCH Modification:

Not affected part are not shown

Intra-DRNS Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.

- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.

HS-DSCH Modification:

Not affected part are not shown

General:

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE or *HS-DSCH MAC-d Flows To Add* IE, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [4], subclause 5.10.1.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE only for one of the DCHs in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message for only one of the combined Radio Links.

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH of the RL except during compressed mode, when the δP_{curr}, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

/* end changed section */

3GPP TSG-RAN WG3 Meeting #47   *Tdoc* ⌘ *R3-050691*
Athens, Greece, 9ᵗʰ – 13ᵗʰ May 2005

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **25.423** CR **1046** | ⌘ **rev** | **1** | ⌘ | Current version: | **6.5.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X**   Core Network ☐

Title:	⌘	Correction to the RL Reconf for serving HS-DSCH cell change.

Source:	⌘	RAN3

Work item code: ⌘	HSDPA-IubIur		***Date:*** ⌘	11/5/2004

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:	⌘	For the scenario of inter Node B (Intra DRNC) serving HS-DSCH cell change, the ALCAP data transport bearer need to be establish. This is because the DRNC does not have a mean to know the timing to switch the transferring of the FP frame data from old transport bearer(old serving Node B) to new transport bearer (New serving Node B) in case the Iur transport bearer is not re-established.

Further, we assume that when executing the inter Node B (Intra DRNC) serving HS-DSCH cell change, only the *HS-DSCH RL ID* IE is included in the RADIO LINK RECONFIGURATION PREPARE message. This is because the HS-DSCH related information has been stored in the UE Context of the DRNC so if there is no any HS-DSCH MAC-d flow to be added/deleted/modified, only *HS-DSCH RL ID* IE is enough.

However, with the current procedure text in 25.423, it has only specified that the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In other words, the current 25.423 does not clearly specify in the RADIO LINK RECONFIGURATION READY message(for Synchronised case) and RADIO LINK RECONFIGURATION RESPONSE message (for Unsynchronised case) to include *Transport Layer Address* IE and *Binding ID* IE for SRNC to establish ALCAP data transport bearer for the case other than "HS-DSCH MAC-d flow being added" and "HS-DSCH MAC-d flow being modified" . In particular, for the case of inter Node B (Intra DRNC) serving HS-DSCH cell change. |

	This could cause an IoT problem if the implementation interpret from the current procedure text that it does not have to include *Transport Layer Address* IE and *Binding ID* IE in the RADIO LINK RECONFIGURATION READY message for Inter-Node B (intra-DRNC) synchronised serving HS-DSCH cell change.	
	Please note that for the intra Node B (intra DRNC) serving HS-DSCH cell change, while it is same for the inter Node B (intra DRNC) serving HS-DSCH cell change that only *HS-DSCH RL ID* IE is included in the RADIO LINK RECONFIGURATION PREPARE message, there is no need to establish the ALCAP Data Transport Bearer. For this scenario, the DRNC could possibly not include *Transport Layer Address* IE and *Binding ID* IE in RADIO LINK RECONFIGURATION READY message.	
Summary of change: ⌘	In chapter 8.3.4.2 Synchronised Radio Link Reconfiguration Preparation and in chapter 8.3.7.2 Unsynchronised Radio Link Reconfiguration, the procedure text that describes the condition to include *Transport Layer Address* IE and *Binding ID* IE are added. Impact assessment towards the previous version of the specification (same rlease): This CR has an isolated impact with the previous version of the specification (same release). This CR has an impact under functional point of view. The impact can be considered isolated, because the change affects one function namely the Radio Link Reconfiguration for serving HS-DSCH cell change.	
Consequences if not approved: ⌘	The ambiguity remain in the spec and therefore may cause the implementation not to *Transport Layer Address* IE and *Binding ID* IE in relevant messages.	

Clauses affected:	⌘	8.3.4.2, 8.3.7.2		

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	CR1045 on TS25.423v5.13.0
			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.

<mark>/* start changed section */</mark>

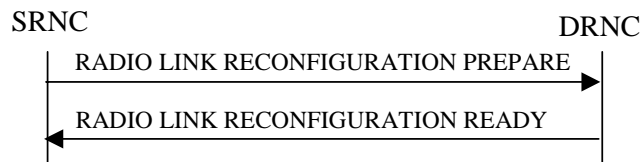# 8.3.4   Synchronised Radio Link Reconfiguration Preparation

8.3.4.1   General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.4.2   Successful Operation

Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon receipt, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

Not affected part are not shown

Intra-DRNS Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

-     The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

-     The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.

-     The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.

- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.

- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Modification:

Not affected part are not shown

General

If the requested modifications are allowed by the DRNC and the DRNC has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCHs To Modify* IE, *DSCHs To Add* IE, [TDD - *USCHs To Modify* IE, *USCHs To Add* IE], *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD - *E-DCH MAC-d Flows to Add*,] or in the *RL Specific DCH Information* IEs, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being added, or any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow being added,] or any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the DCHs in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the combined Radio Links.

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE respectively. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL - except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the δP_{curr}, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

[TDD - If the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE][1.28Mcps TDD - *DL Time Slot ISCP Info LCR* IE] is present, the DRNS should use the indicated values when deciding the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use the indicated values when deciding the Initial DL TX Power.]

/* next changed section */

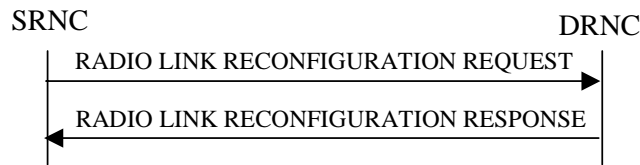# 8.3.7 Unsynchronised Radio Link Reconfiguration

8.3.7.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.7.2   Successful Operation

SRNC   DRNC
        RADIO LINK RECONFIGURATION REQUEST
        ──►
        RADIO LINK RECONFIGURATION RESPONSE
        ◄──

Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon receipt, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL to be modified according to Annex A.

DCH Modification:

Not affected part are not shown

Intra-DRNS Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

-      The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

-      The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.

-      The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

-      If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

-      [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

-      [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

-      [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.

HS-DSCH Modification:

Not affected part are not shown

General:

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD - or *E-DCH MAC-d Flows to Add* IE], the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d] flow being added, or any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [4], subclause 5.10.1.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE only for one of the DCHs in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message for only one of the combined Radio Links.

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The DRNS shall not transmit with a higher power than indicated

by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the δP_{curr}, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

/* end changed section */

CR-Form-v7.1

CHANGE REQUEST

⌘   **25.450 CR 004**   ⌘**rev**   **-**   ⌘   Current version: **5.1.0**   ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X**   Core Network ☐

Title: ⌘	Correction on use of SCCP connection for Information Exchange Context	
Source: ⌘	RAN3	
Work item code: ⌘	TEI5	***Date:*** ⌘ 02/05/2005

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 use of SCCP connection is not clear and not aligned with 25.453.
Summary of change: ⌘	Iu-pc is aligned with Iu-r. The RNC must use an existing SCCP connection for Information Exchange.
Consequences if not approved: ⌘	Ambiguous and incorrect specifications can lead to inter-operability problems. Impact Analysis: The CR has isolated impact on the use of SCCP connection for Iu-pc. The CR is backward's compatible with implementations that are aligned with the intended behaviour of aligning Iu-pc with Iu-r interface.

Clauses affected: ⌘	4.5.1.3	

	Y	N		
Other specs ⌘	**X**		Other core specifications ⌘	25.453v5.10.0CR81, 25.453v6.8.0CR82, 25.450v6.0.0CR5
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.

4.5.1.3 SCCP connection establishment
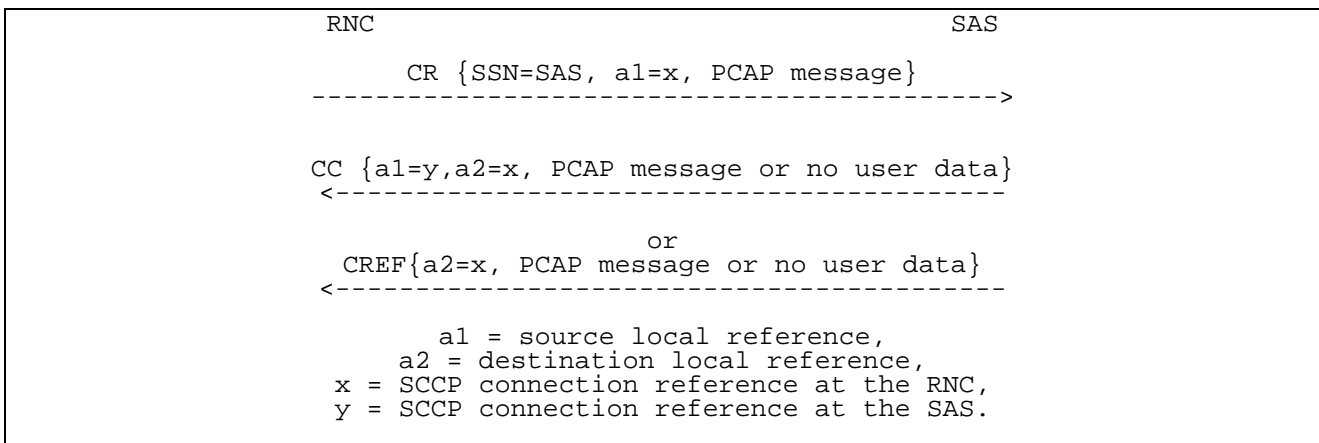
Information Exchange services

A new SCCP connection is established when the RNC initiates a class-1 elementary procedure for Information Exchange services and there is no signalling bearer existing for this purpose, unless there is an existing SCCP connection associated with Information Exchange services: in this case, the RNC may rely on the existing SCCP connection to initiate the class-1 elementary procedure.

An SCCP connection is always established by the RNC.

Initiation

The RNC sends SCCP CONNECTION REQUEST message to the SAS. A PCAP message is included in the user data field of the SCCP CONNECTION REQUEST message.**Termination**

- **successful outcome:**

    - The SCCP CONNECTION CONFIRM message, which may optionally contain a PCAP message in the user data field, is returned to the RNC.

- **unsuccessful outcome:**

- If the SCCP signalling connection establishment fails, an SCCP CONNECTION REFUSAL message will be sent back to the RNC. This message may contain a PCAP message.

```
RNC                                                         SAS
          CR {SSN=SAS, a1=x, PCAP message}
      -------------------------------------------->


      CC {a1=y,a2=x, PCAP message or no user data}
       <-------------------------------------

                        or
       CREF{a2=x, PCAP message or no user data}
       <-------------------------------------

           a1 = source local reference,
         a2 = destination local reference,
     x = SCCP connection reference at the RNC,
     y = SCCP connection reference at the SAS.
```

Figure 1: Setting-up of RNC Initiated SCCP Signalling Connection with SAS

4.5.1.4 SCCP connection release

This procedure is always initiated by the RNC. An SCCP connection is released when the RNC realises that a given signalling connection is no longer required. This is accomplished by the RNC sending a SCCP RELEASED message.

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **25.450** CR **005** | ⌘**rev** | **-** | ⌘ | Current version: | **6.0.0** | ⌘ |

For **HELP** *on using this form, see bottom of this page or look at the pop-up text over the* ⌘ *symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network **X** Core Network ☐

Title: ⌘	Correction on use of SCCP connection for Information Exchange Context	
Source: ⌘	RAN3	
Work item code:⌘	TEI5	***Date:*** ⌘ 02/05/2005
Category: ⌘ **A**	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.	***Release:*** ⌘ Rel-6 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 use of SCCP connection is not clear and not aligned with 25.453.
Summary of change:⌘	Iu-pc is aligned with Iu-r. The RNC must use an existing SCCP connection for Information Exchange.
Consequences if not approved: ⌘	Ambiguous and incorrect specifications can lead to inter-operability problems. Impact Analysis: The CR has isolated impact on the use of SCCP connection for Iu-pc. The CR is backward's compatible with implementations that are aligned with the intended behaviour of aligning Iu-pc with Iu-r interface.

Clauses affected: ⌘	4.5.1.3		
		Y	N	
Other specs ⌘	**X**	☐	Other core specifications ⌘	25.453v5.10.0CR81, 25.453v6.8.0CR82, 25.450v5.1.0CR4
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.

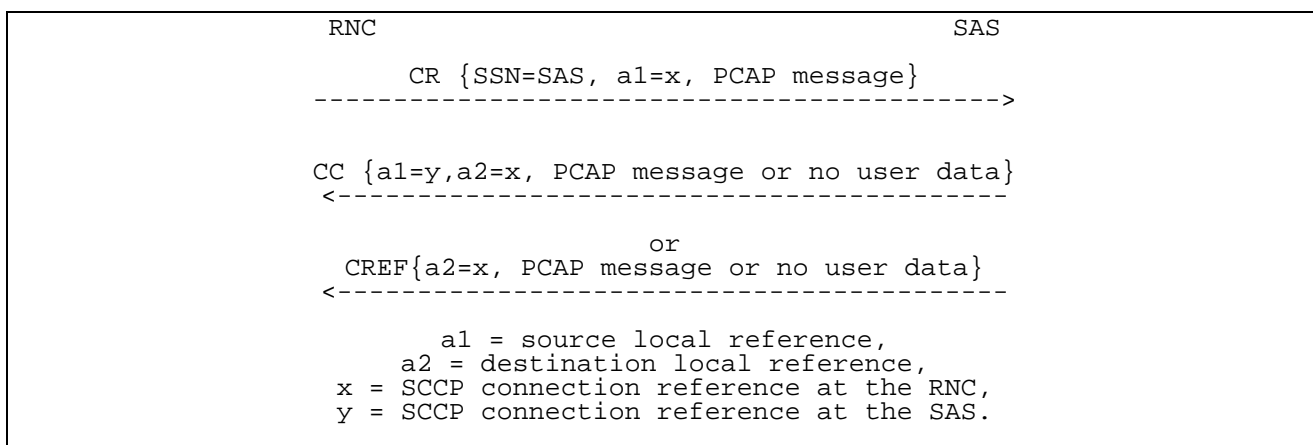## 4.5.1.3 SCCP connection establishment

Information Exchange services

A new SCCP connection is established when the RNC initiates a class-1 elementary procedure for Information Exchange services, and there is no signalling bearer existing for this purpose, unless there is an existing SCCP connection associated with Information Exchange services: in this case, the RNC may rely on the existing SCCP connection to initiate the class-1 elementary procedure.

An SCCP connection is always established by the RNC.

Initiation

The RNC sends SCCP CONNECTION REQUEST message to the SAS. A PCAP message is included in the user data field of the SCCP CONNECTION REQUEST message.**Termination**

- **successful outcome:**

    - The SCCP CONNECTION CONFIRM message, which may optionally contain a PCAP message in the user data field, is returned to the RNC.

- **unsuccessful outcome:**

- If the SCCP signalling connection establishment fails, an SCCP CONNECTION REFUSAL message will be sent back to the RNC. This message may contain a PCAP message.

```
RNC                                                        SAS
         CR {SSN=SAS, a1=x, PCAP message}
      ------------------------------------------->


      CC {a1=y,a2=x, PCAP message or no user data}
       <------------------------------------------
                          or
       CREF{a2=x, PCAP message or no user data}
       <------------------------------------------

            a1 = source local reference,
          a2 = destination local reference,
      x = SCCP connection reference at the RNC,
      y = SCCP connection reference at the SAS.
```

Figure 1: Setting-up of RNC Initiated SCCP Signalling Connection with SAS

4.5.1.4 SCCP connection release

This procedure is always initiated by the RNC. An SCCP connection is released when the RNC realises that a given signalling connection is no longer required. This is accomplished by the RNC sending a SCCP RELEASED message.

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **25.453** CR **081** | ⌘ **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 **X** Core Network ☐

| **Title:** | ⌘ | Correction of deletion of Information Exchange Context |

| **Source:** | ⌘ | RAN3 |

| **Work item code:** ⌘ | TEI5 | | **Date:** ⌘ | 02/05/2005 |

| **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 Information Exchange Termination procedure only terminates the Information Exchange procedure identified by the INFORMATION EXCHANGE ID IE. Multiple Information Exchanges can use the same Information Exchange Context. Hence it is not possible delete the Information Exchange Context using the Information Exchange Termination message. |

| **Summary of change:** ⌘ | Information Exchange context is deleted when the SCCP connection associated with the context is released instead of the Information Exchange Termination.

R1: The context handling is aligned with Iu-r. The context is deleted after the last Information exchange. |

| **Consequences if not approved:** | ⌘ | Ambiguous and incorrect specifications can lead to inter-operability problems.

Impact Analysis:
The CR has isolated impact on the use of SCCP connection for Iu-pc. The CR is backward's compatible with implementations that are aligned with the intended behaviour of aligning Iu-pc with Iu-r interface. |

| **Clauses affected:** | ⌘ | 3.1 |

		Y	**N**			
Other specs	⌘	X		Other core specifications	⌘	25.453v6.8.0CR82, 25450v5.1.0CR4, 25.450v6.0.0CR5
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.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

Standalone A-GPS SMLC (SAS): logical node that interconnects to the RNC over the Iupc interface via the PCAP protocol

An SAS performs the following procedures:

- provide GPS related data to the RNC;

- performs the position calculation function for UE assisted GPS.

Elementary Procedure: PCAP consists of Elementary Procedures (EPs)

An Elementary Procedure is a unit of interaction between the RNC and the SAS. An EP consists of an initiating message and possibly a response message. Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure).

- **Class 2:** Elementary Procedures without response.

For Class 1 EPs, the types of responses can be as follows:

Successful:

- A signalling message explicitly indicates that the elementary procedure successfully completed with the receipt of the response.

Unsuccessful:

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Information Exchange Context: Information Exchange Context is created by the first Information Exchange Initiation Procedure initiated by the RNC and requested from the SAS

The Information Exchange Context is deleted afterby the Information Exchange Termination or the Information Exchange Failure procedure when there is no more Information Exchange to be provided by the RNC to the SAS. The Information Exchange Context is identified by an SCCP connection as, for Information Exchanges, only the connection oriented mode of the signalling bearer is used.

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.453** CR **82** ⌘ **rev** **2** ⌘ Current version: **6.8.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network **X** Core Network ☐

Title: ⌘	Correction of deletion of Information Exchange Context	
Source: ⌘	RAN3	
Work item code: ⌘	TEI5	***Date:*** ⌘ 02/05/2005

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: ⌘	The Information Exchange Termination procedure only terminates the Information Exchange procedure identified by the INFORMATION EXCHANGE ID IE. Multiple Information Exchanges can use the same Information Exchange Context. Hence it is not possible delete the Information Exchange Context using the Information Exchange Termination message.
Summary of change: ⌘	Information Exchange context is deleted when the SCCP connection associated with the context is released instead of the Information Exchange Termination. R1: The context handling is aligned with Iu-r. The context is deleted after the last Information exchange. R2: Corrected error in revision R1 to align with Iur.
Consequences if not approved: ⌘	Ambiguous and incorrect specifications can lead to inter-operability problems. Impact Analysis: The CR has isolated impact on the use of SCCP connection for Iu-pc. The CR is backward's compatible with implementations that are aligned with the intended behaviour of aligning Iu-pc with Iu-r interface.

Clauses affected: ⌘	3.1	

		Y	N
Other specs ⌘	X		Other core specifications ⌘ 25.453v5.10.0CR81, 25450v5.1.0CR4, 25.450v6.0.0CR5

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.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

Stand-Alone SMLC (SAS): logical node that interconnects to the RNC over the Iupc interface via the PCAP protocol
An SAS performs the following procedures:

- provide GPS related data to the RNC;

- performs the position calculation function based upon UE Positioning measurement data.

Elementary Procedure: PCAP consists of Elementary Procedures (EPs)
An Elementary Procedure is a unit of interaction between the RNC and the SAS. An EP consists of an initiating message and possibly a response message. Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure).

- **Class 2:** Elementary Procedures without response.

For Class 1 EPs, the types of responses can be as follows:

Successful:

- A signalling message explicitly indicates that the elementary procedure successfully completed with the receipt of the response.

Unsuccessful:

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Information Exchange Context: Information Exchange Context is created by the first Information Exchange Initiation Procedure initiated by the RNC and requested from the SAS
The Information Exchange Context is deleted ~~by~~ after the Information Exchange Termination or the Information Exchange Failure procedure when there is no more Information Exchange to be provided by the RNC to the SAS. The Information Exchange Context is identified by an SCCP connection as, for Information Exchanges, only the connection oriented mode of the signalling bearer is used.

3GPP TSG-RAN WG3 #47

⌘ *R3-050692*

Athens, Greece, 9th – 13th May 2005

CR-Form-v7.1

<table>
<tr><td colspan="6" align="center">CHANGE REQUEST</td></tr>
<tr><td>⌘</td><td>25.931 CR 026</td><td>⌘ rev</td><td>1</td><td>⌘ Current version:</td><td>5.1.0 ⌘</td></tr>
</table>

For **HELP** *on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	HS-DSCH Mobility procedures
Source:	⌘	RAN3
Work item code: ⌘	HSDPA-IubIur	***Date:*** ⌘ 09/05/2005
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:
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 the current version of the TR the HS-DSCH mobility examples don't appear to be aligned with the current state of 25.423 and 25.433.
Summary of change: ⌘		Rev1: Text added to reflect the optionality to set up or not a new Iur transport bearer. Rev 0: HS-DSCH mobility examples have been corrected in order to reflect the correct usage of HSDPA specific parameters as per current RNSAP/NBAP. Impact assessment towards the previous version of the specification (same release): --
Consequences if not approved:	⌘	HS-DSCH mobility examples will remain misaligned respect to the relevant specifications.
Clauses affected:	⌘	7.10.5.1; 7.10.5.2; 7.11.1.3.1

		Y	**N**	
Other specs affected:	⌘	**X**		Other core specifications ⌘ TR 25.931 CR27r1
			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:
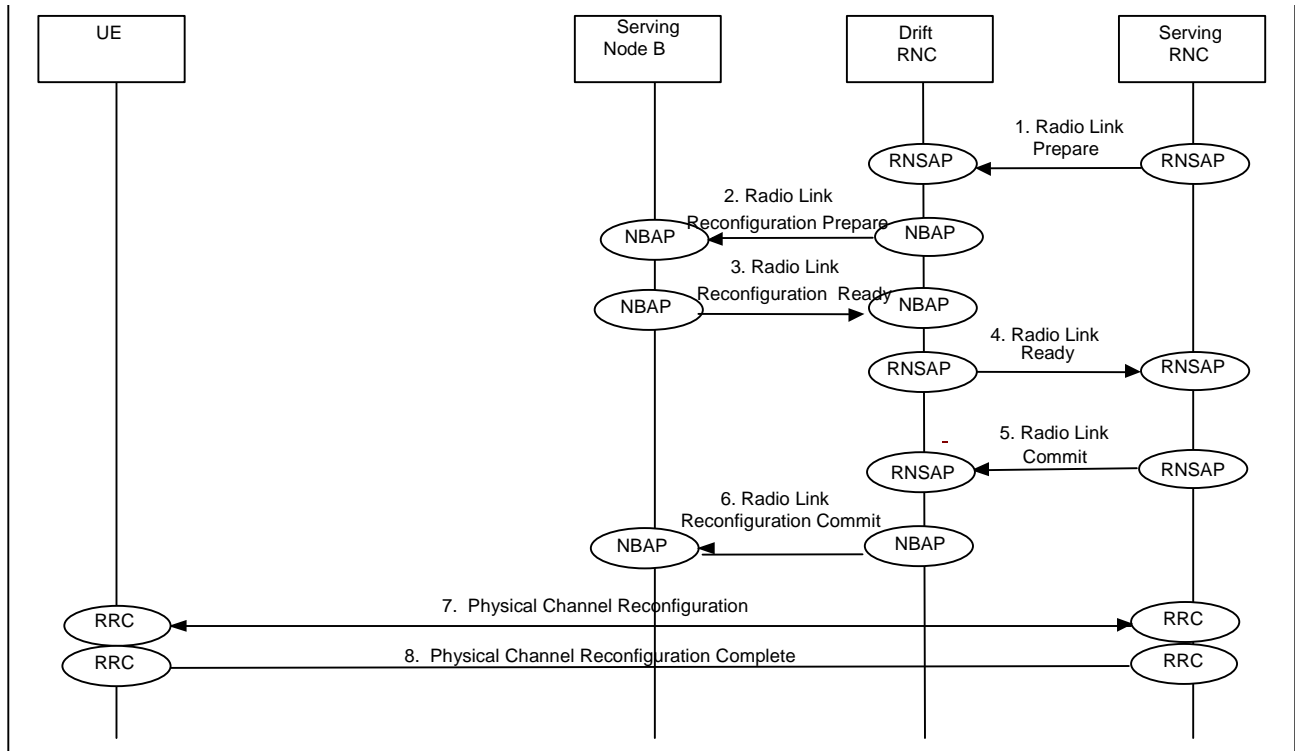
1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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.

7.10.5   HS-DSCH Mobility Procedures

7.10.5.1   Intra-Node B synchronised serving HS-DSCH cell change

This subclause shows an example of an intra-Node B serving HS-DSCH cell change while keeping the dedicated physical channel configuration and the active set.

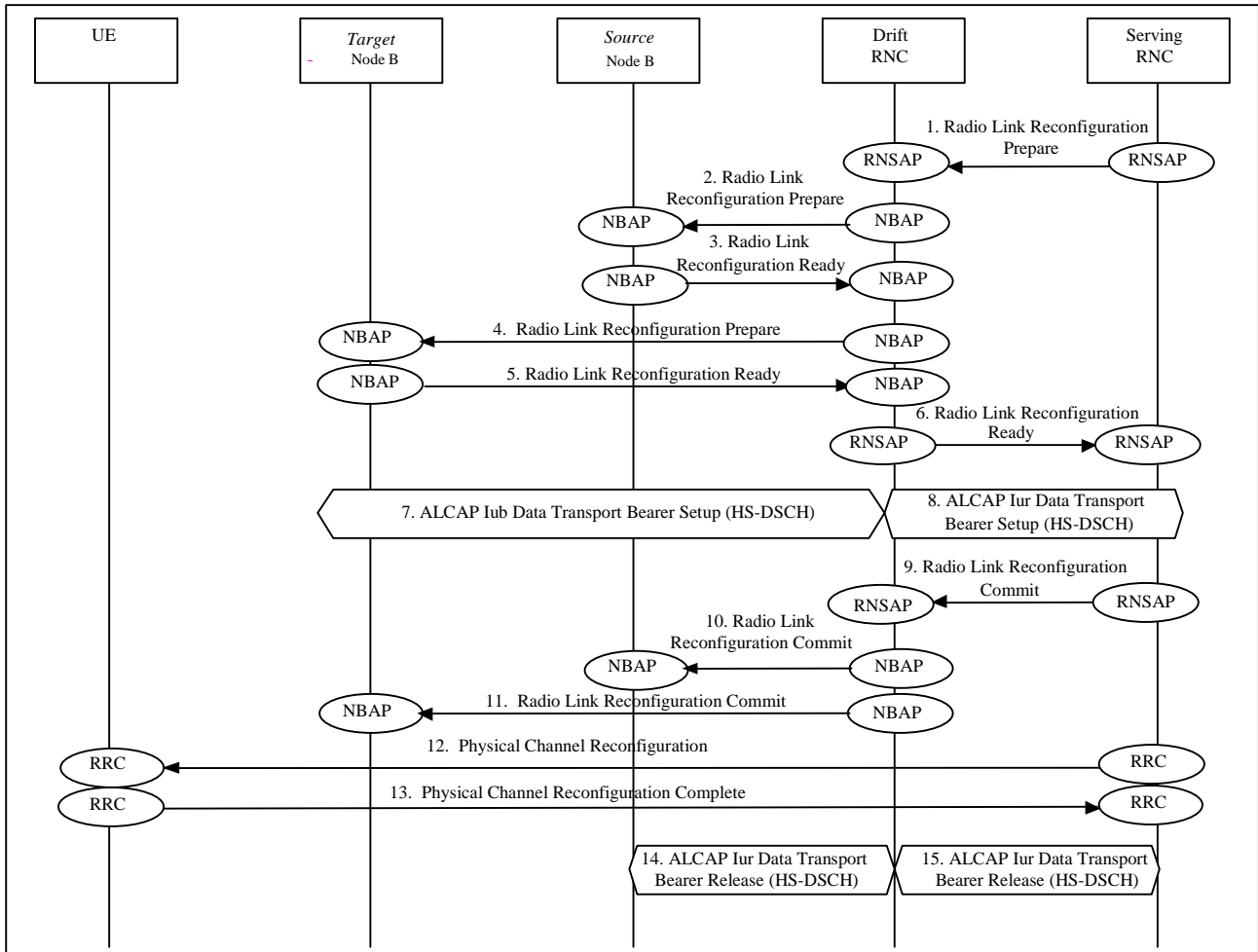**Figure 26b: Intra-Node B synchronised serving HS-DSCH cell change**

1. The SRNC decides there is a need for a serving HS-DSCH cell change and prepares a RNSAP message **Radio Link Reconfiguration Prepare** which is transmitted to the DRNC.
    Parameters: ~~HS-DSCH information and~~ a SRNC selected HS-PDSCH RL ID.

2. In this case, both the source and target HS-DSCH cells are controlled by the same Node B. The DRNC requests the serving HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**. The reconfiguration comprises a transfer of the HS-DSCH resources from the source HS-DSCH radio link to the target HS-DSCH radio link.
    Parameters: ~~HS-DSCH Information~~ a DRNC selected HS-DSCH RNTI and the HS-PDSCH RL ID.

3. The serving HS-DSCH Node B returns a NBAP message **Radio Link Reconfiguration Ready**.
    Parameters: HS-DSCH Information Response.

4. The DRNC returns a RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
    Parameters: HS-DSCH Information Response and the DRNC selected HS-DSCH-RNTI.

5. The SRNC now proceeds by transmitting RNSAP message **Radio Link Reconfiguration Commit** to the DRNC.
    Parameters: SRNC selected activation time in the form of a CFN.

6. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the serving HS-DSCH Node B. At the indicated activation time the serving HS-DSCH Node B stops HS-DSCH transmission to the UE in the source HS-DSCH cell and starts HS-DSCH transmission to the UE in the target HS-DSCH cell.
    Parameters: SRNC selected activation time in the form of a CFN.

7. The SRNC transmits a RRC message **Physical Channel Reconfiguration** to the UE.
   Parameters: activation time, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info and H-RNTI.

8. At the indicated activation time the UE, stops receiving HS-DSCH in the source HS-DSCH cell and starts HS-DSCH reception in the target HS-DSCH cell. The UE then returns a RRC message **Physical Channel Reconfiguration Complete** to the SRNC.

7.10.5.2   Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change

This subclause shows an ATM example of an inter-Node B serving HS-DSCH cell change while keeping the dedicated physical channel configuration and active set.

Figure 26c: Inter-Node B (intra-DRNC) synchronised serving HS-DSCH cell change

1. The SRNC decides there is a need for a serving HS-DSCH cell change and prepares the RNSAP message ~~a~~ **Radio Link Reconfiguration Prepare** which is transmitted to the DRNC. Parameters: ~~HS-DSCH Information and~~ a SRNC selected HS-PDSCH RL ID.

2. In this case, the source and target HS-DSCH cells are controlled by different Node Bs. The DRNC requests the source HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message ~~Radio Link Reconfiguration Prepare~~ **Radio Link Reconfiguration Prepare**, removing its HS-DSCH resources for the source HS-DSCH radio link. Parameters: ~~HS-DSCH Information~~ HS-DSCH MAC-d Flows To Delete~~, a DRNC selected HS-DSCH RNTI and the HS-PDSCH RL ID~~.

3. The source HS-DSCH Node B returns a NBAP message **Radio Link Reconfiguration Ready**. Parameters: ~~HS-DSCH Information Response~~ no HSDPA-specific parameters.

4. The DRNC requests the target HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, adding HS-DSCH resources for the target HS-DSCH radio link.
   Parameters: HS-DSCH Information, a DRNC selected HS-DSCH RNTI and the HS-PDSCH RL ID.

5. The target HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
   Parameters: HS-DSCH Information Response.

6. The DRNC returns the RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
   Parameters: HS-DSCH Information Response and the DRNC selected HS-DSCH-RNTI.

7. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iub Data Transport Bearer to the HS-DSCH.

8. The SRNC may initiates set-up of a new Iur Data Transport bearer using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the HS-DSCH.

9. The HS-DSCH transport bearer to the target HS-DSCH Node B is established. The SRNC proceeds by transmitting the RNSAP message **Radio Link Reconfiguration Commit** to the DRNC.
   Parameters: SRNC selected activation time in the form of a CFN.

10. The DRNC transmits the NBAP message **Radio Link Reconfiguration Commit** to the source HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in the form of a CFN.

11. The DRNC transmits the NBAP message **Radio Link Reconfiguration Commit** to the target HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in form of a CFN.

12. The SRNC also transmits a RRC message **Physical Channel Reconfiguration** to the UE.
    Parameters: activation time, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info and H-RNTI.

13. At the indicated activation time the UE stops receiving HS-DSCH in the source HS-DSCH cell and starts HS-DSCH reception in the target HS-DSCH cell. The UE returns a RRC message **Physical Channel Reconfiguration Complete** to the SRNC.

14. The DRNC initiates release of the old Iub Data Transport bearer using ALCAP protocol.

15. If a new Iur Data Transport Bearer was set up in 8. then Tthe SRNC initiates release of the old Iur Data Transport bearer using ALCAP protocol.
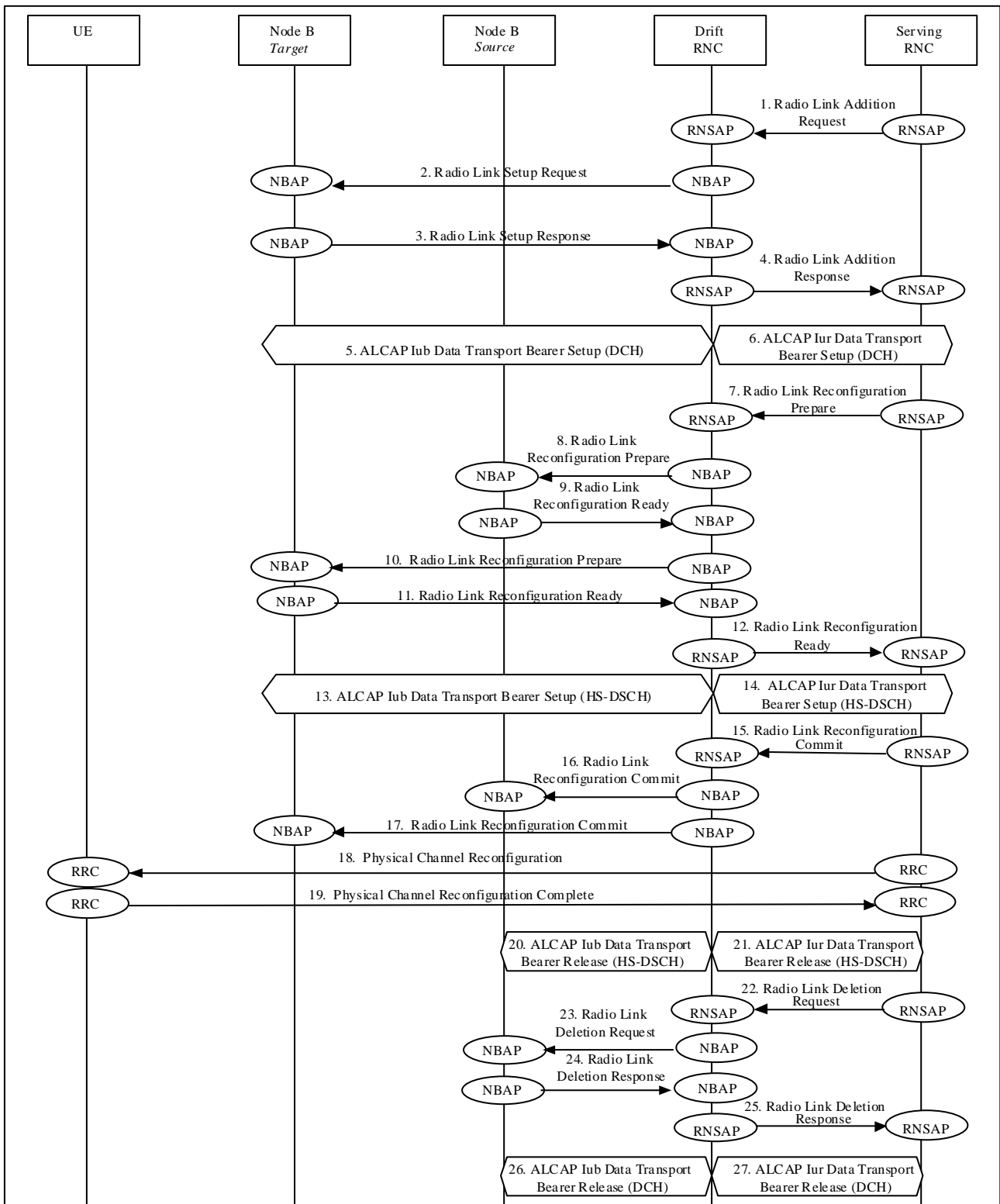
**********************************Unaffected TEXT**********************************

7.11.1.3   Inter-Node B synchronised serving HS-DSCH cell change at hard handover

This subclause shows ATM examples of hard handover combined with an inter-Node B serving HS-DSCH cell change.

7.11.1.3.1 Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change at hard handover

In the following example the HS-DSCH mobility procedure is performed in two steps: the first step consists of establishing a new radio link without the HS-DSCH resources; the next step is a transfer of the HS-DSCH resources to this new radio link followed by a release of the old radio link. In the radio interface, a combined procedure is used.

Figure 29a: Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change at hard handover

1. The SRNC decides that there is a need for a hard handover combined with a serving HS-DSCH cell change. It prepares a RNSAP message **Radio Link Addition Request**, which is transmitted to the DRNC.
    Parameters: target cell ID.

2. The DRNC allocates radio resources for the new radio link and requests the target Node B to establish a new radio link by transmitting a NBAP message **Radio Link Setup Request.**
    Parameters: ~~HS-DSCH Information and HS-PDSCH RL ID~~ no HSDPA-specific parameters.

3. The target Node B allocates resources, starts physical layer reception on the DPCH on the new radio link and responds with the NBAP message **Radio Link Setup Response**.
   Parameters: no HSDPA-specific paramters.~~HS-DSCH Information Response.~~

4. The DRNC responds to the SRNC with the RNSAP message **Radio Link Addition Response** and the DCH transport bearer is established.

5. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iub~r~ Data Transport Bearer to the DCH.

6. In case of no combination in the DRNC, ~T~the SRNC initiates set-up of a new Iur Data Transport Bearer~s~ using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the DCH.

7. As the next step, the SRNC prepares the RNSAP message **Radio Link Reconfiguration Prepare** which is transmitted to the DRNC.
   Parameters: ~HS-DSCH information, and~ SRNC selected HS-PDSCH RL ID.

8. The DRNC requests the source HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, removing its HS-DSCH resources for the source HS-DSCH radio link.
   Parameters: ~HS-DSCH Information~ HS-DSCH MAC-d Flows To Delete~, a DRNC allocated HS-DSCH-RNTI and HS-PDSCH RL ID~.

9. The source HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
   Parameters: ~HS-DSCH Information Response~no HSDPA-specific parameters.

10. The DRNC requests the target HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, adding HS-DSCH resources for the target HS-DSCH radio link.
    Parameters: HS-DSCH information including an HS-PDSCH RL ID and a DRNC selected HS-DSCH RNTI.

11. The target HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
    Parameters: HS-DSCH Information Response.

12. The DRNC returns the RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
    Parameters: HS-DSCH information response and the DRNC selected HS-DSCH-RNTI.

13. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iu~r~b Data Transport Bearer to the HS-DSCH.

14. The S~D~RNC may initiate~s~ set-up of a new Iur Data Transport Bearer~s~ using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the HS-DSCH.

15. The HS-DSCH transport bearer to the target HS-DSCH Node B is established. The SRNC proceeds by transmitting the RNSAP message **Radio Link Reconfiguration Commit** to the DRNC including an SRNC selected activation time in the form of a CFN.
    Parameters: SRNC selected activation time in the form of a CFN.

16. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the source HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in the form of a CFN.

17. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the target HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in the form of a CFN

18. The SRNC also transmits a RRC message **Physical Channel Reconfiguration** to the UE.
    Parameters: activation time, DPCH information for the target cell, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info and H-RNTI.

19. At the indicated activation time the UE abandons the current active set and initiates establishment of the DPCH in the target cell. When physical layer synchronisation is established in the target cell, it starts DPCH reception and

transmission and HS-DSCH reception in the target cell. The UE returns the RRC message **Physical Channel Reconfiguration Complete** to the SRNC.

20. The DRNC initiates release of the old Iub Data Transport bearer to the source HS-DSCH Node B using ALCAP protocol.

21. If a new Iur Data Transport Bearer was set up in 14. then Tthe SRNC initiates release of the old Iur Data Transport bearer using ALCAP protocol.

22. The SRNC then finalises the procedure by transmitting the RNSAP message **Radio Link Deletion Request** to the DRNC.
    In the message the source cell to be deleted is identified.
    Parameters: RL ID.

23. The DRNC transmits the NBAP message **Radio Link Deletion Request** to the source Node B.
    Parameters: RL ID.

24. The source Node B releases resources for the source radio link and returns the NBAP message **Radio Link Deletion Response** to the DRNC.

25. The DRNC returns the RNSAP message **Radio Link Deletion Response** to the SRNC.

26. The DRNC initiates release of the old Iub DCH Transport bearer to the source HS-DSCH Node B using ALCAP protocol.

27. If a new Iur Data Transport Bearer was set up in 6. then Tthe SRNC initiates release of the old Iur DCH Transport bearer using ALCAP protocol.

***************************** END of modification *****************************

3GPP TSG-RAN WG3 #47   ⌘*R3-050693*
Athens, Greece, 9th – 13th May 2005

	CR-Form-v7.1	

CHANGE REQUEST

⌘   **25.931 CR 027**   ⌘**rev 1** ⌘   Current version: **6.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X**   Core Network ☐

Title: ⌘	HS-DSCH Mobility procedures	
Source: ⌘	RAN3	
Work item code:⌘	HSDPA-IubIur	***Date:*** ⌘ 09/05/2005
Category: ⌘ **F**		***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 the current version of the TR the HS-DSCH mobility examples don't appear to be aligned with the current state of 25.423 and 25.433.
Summary of change:⌘	Rev1: Text added to reflect the optionality to set up or not a new Iur transport bearer. Rev 0: HS-DSCH mobility examples have been corrected in order to reflect the correct usage of HSDPA specific parameters as per current RNSAP/NBAP. Impact assessment towards the previous version of the specification (same release): --
Consequences if ***not approved:*** ⌘	HS-DSCH mobility examples will remain misaligned respect to the relevant specifications.

Clauses affected: ⌘	7.10.5.1; 7.10.5.2; 7.11.1.3.1

	Y	**N**		
Other specs ⌘	**X**		Other core specifications ⌘	TR 25.931 CR 26r1
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.
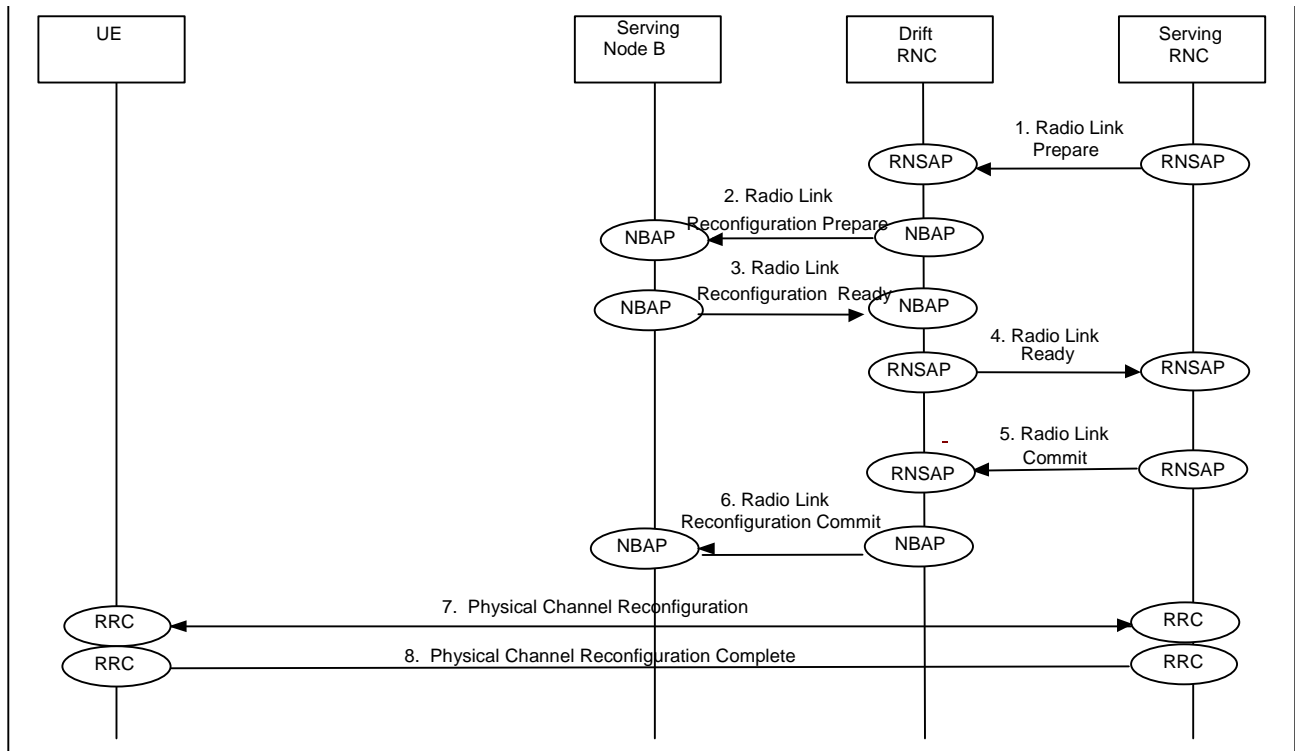Below is a brief summary:

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.

*********************************** Unaffected TEXT ***********************************

7.10.5 HS-DSCH Mobility Procedures

7.10.5.1 Intra-Node B synchronised serving HS-DSCH cell change

This subclause shows an example of an intra-Node B serving HS-DSCH cell change while keeping the dedicated physical channel configuration and the active set.

Figure 26b: Intra-Node B synchronised serving HS-DSCH cell change

1. The SRNC decides there is a need for a serving HS-DSCH cell change and prepares a RNSAP message **Radio Link Reconfiguration Prepare** which is transmitted to the DRNC.
    Parameters: ~~HS-DSCH information and~~ a SRNC selected HS-PDSCH RL ID.

2. In this case, both the source and target HS-DSCH cells are controlled by the same Node B. The DRNC requests the serving HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**. The reconfiguration comprises a transfer of the HS-DSCH resources from the source HS-DSCH radio link to the target HS-DSCH radio link.
    Parameters: ~~HS-DSCH Information~~ a DRNC selected HS-DSCH RNTI and the HS-PDSCH RL ID.

3. The serving HS-DSCH Node B returns a NBAP message **Radio Link Reconfiguration Ready**.
    Parameters: HS-DSCH Information Response.

4. The DRNC returns a RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
    Parameters: HS-DSCH Information Response and the DRNC selected HS-DSCH-RNTI.

5. The SRNC now proceeds by transmitting RNSAP message **Radio Link Reconfiguration Commit** to the DRNC.
    Parameters: SRNC selected activation time in the form of a CFN.

6. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the serving HS-DSCH Node B.
    At the indicated activation time the serving HS-DSCH Node B stops HS-DSCH transmission to the UE in the source HS-DSCH cell and starts HS-DSCH transmission to the UE in the target HS-DSCH cell.
    Parameters: SRNC selected activation time in the form of a CFN.

7. The SRNC transmits a RRC message **Physical Channel Reconfiguration** to the UE.
    Parameters: activation time, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info
    and H-RNTI.

8. At the indicated activation time the UE, stops receiving HS-DSCH in the source HS-DSCH cell and starts HS-
    DSCH reception in the target HS-DSCH cell. The UE then returns a RRC message **Physical Channel
    Reconfiguration Complete** to the SRNC.

7.10.5.2 Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change

This subclause shows an ATM example of an inter-Node B serving HS-DSCH cell change while keeping the dedicated
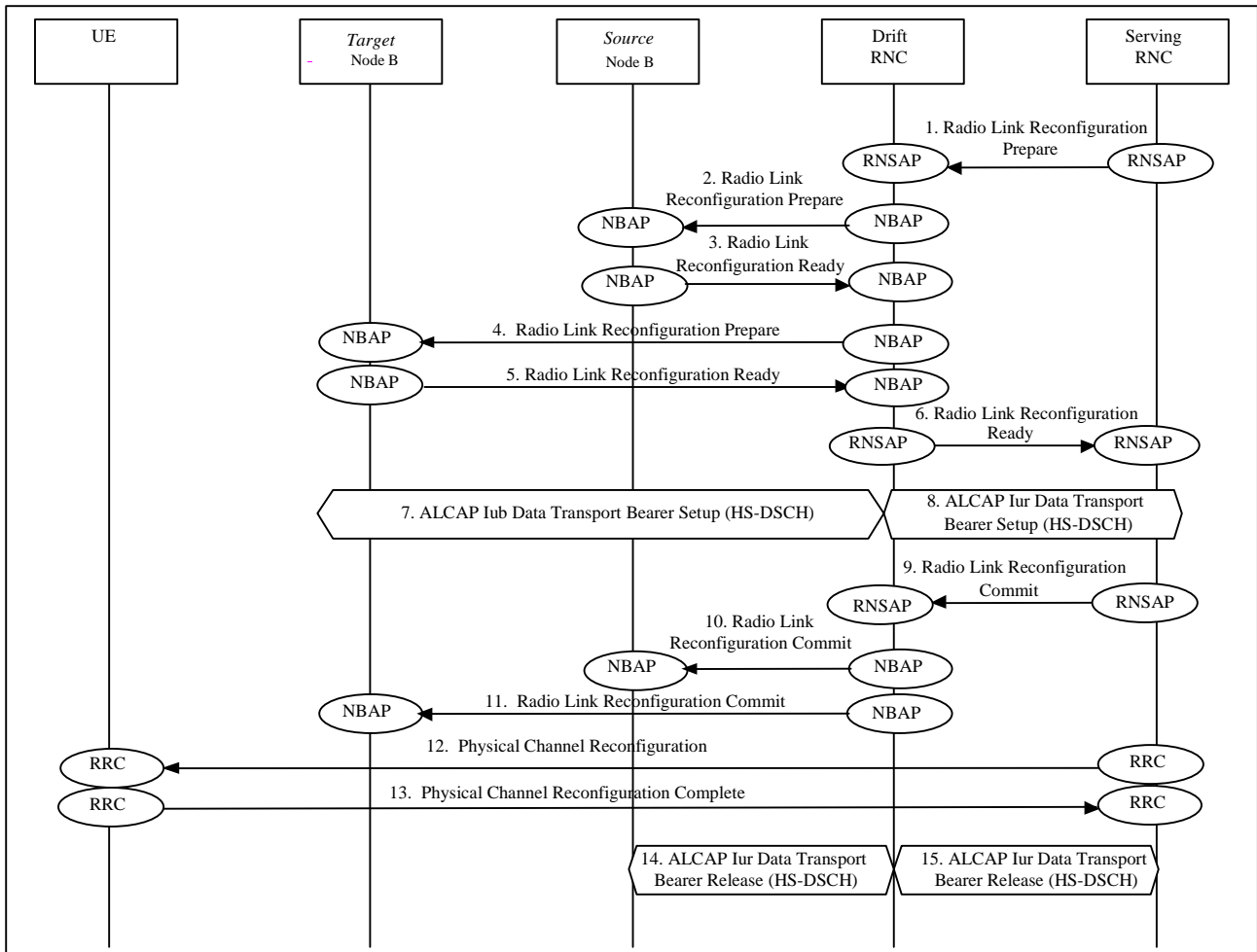physical channel configuration and active set.

Figure 26c: Inter-Node B (intra-DRNC) synchronised serving HS-DSCH cell change

1. The SRNC decides there is a need for a serving HS-DSCH cell change and prepares the RNSAP message ~~a~~ **Radio
    Link Reconfiguration Prepare** which is transmitted to the DRNC. Parameters: ~~HS-DSCH Information and~~ a
    SRNC selected HS-PDSCH RL ID.

2. In this case, the source and target HS-DSCH cells are controlled by different Node Bs. The DRNC requests the
    source HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message ~~Radio
    Link Reconfiguration Prepare~~ **Radio Link Reconfiguration Prepare**, removing its HS-DSCH resources for the
    source HS-DSCH radio link. Parameters: ~~HS-DSCH Information~~ HS-DSCH MAC-d Flows To Delete~~, a DRNC
    selected HS-DSCH RNTI and the HS-PDSCH RL ID~~.

3. The source HS-DSCH Node B returns a NBAP message **Radio Link Reconfiguration Ready**.
    Parameters: ~~HS-DSCH Information Response~~no HSDPA-specific parameters.

4. The DRNC requests the target HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, adding HS-DSCH resources for the target HS-DSCH radio link.
    Parameters: HS-DSCH Information, a DRNC selected HS-DSCH RNTI and the HS-PDSCH RL ID.

5. The target HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
    Parameters: HS-DSCH Information Response.

6. The DRNC returns the RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
    Parameters: HS-DSCH Information Response and the DRNC selected HS-DSCH-RNTI.

7. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iub Data Transport Bearer to the HS-DSCH.

8. The SRNC <mark>may initiates</mark> set-up of a new Iur Data Transport bearer using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the HS-DSCH.

9. The HS-DSCH transport bearer to the target HS-DSCH Node B is established. The SRNC proceeds by transmitting the RNSAP message **Radio Link Reconfiguration Commit** to the DRNC.
    Parameters: SRNC selected activation time in the form of a CFN.

10. The DRNC transmits the NBAP message **Radio Link Reconfiguration Commit** to the source HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in the form of a CFN.

11. The DRNC transmits the NBAP message **Radio Link Reconfiguration Commit** to the target HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
    Parameters: SRNC selected activation time in form of a CFN.

12. The SRNC also transmits a RRC message **Physical Channel Reconfiguration** to the UE.
    Parameters: activation time, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info and H-RNTI.

13. At the indicated activation time the UE stops receiving HS-DSCH in the source HS-DSCH cell and starts HS-DSCH reception in the target HS-DSCH cell. The UE returns a RRC message **Physical Channel Reconfiguration Complete** to the SRNC.

14. The DRNC initiates release of the old Iub Data Transport bearer using ALCAP protocol.

15. <mark>If a new Iur Data Transport Bearer was set up in 8. then</mark> ~~T~~<mark>the</mark> SRNC initiates release of the old Iur Data Transport bearer using ALCAP protocol.
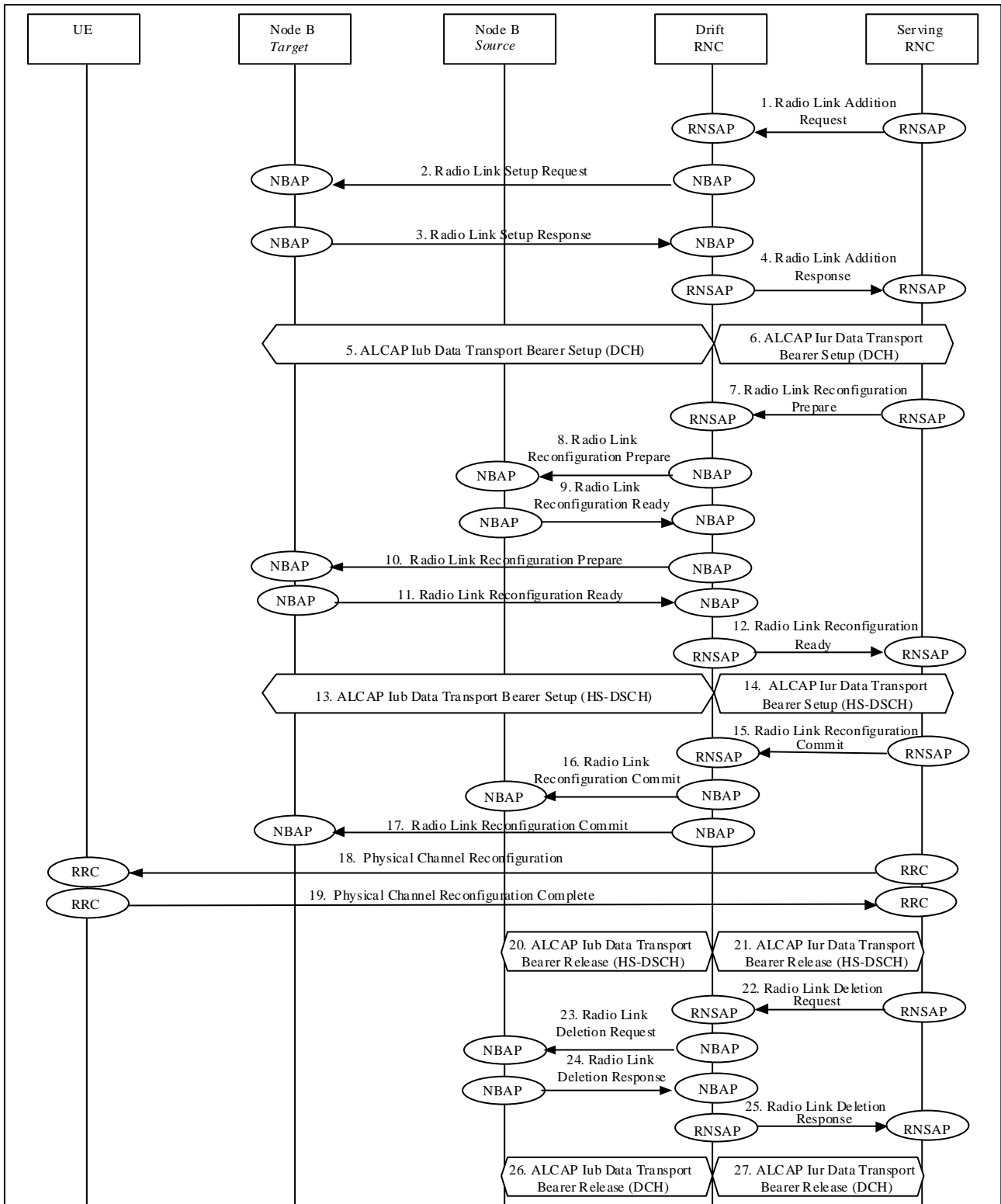
*********************************Unaffected TEXT*********************************

7.11.1.3   Inter-Node B synchronised serving HS-DSCH cell change at hard handover

This subclause shows ATM examples of hard handover combined with an inter-Node B serving HS-DSCH cell change.

7.11.1.3.1 Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change at hard handover

In the following example the HS-DSCH mobility procedure is performed in two steps: the first step consists of establishing a new radio link without the HS-DSCH resources; the next step is a transfer of the HS-DSCH resources to this new radio link followed by a release of the old radio link. In the radio interface, a combined procedure is used.

Figure 29a: Inter-Node B (intra DRNC) synchronised serving HS-DSCH cell change at hard handover

1. The SRNC decides that there is a need for a hard handover combined with a serving HS-DSCH cell change. It prepares a RNSAP message **Radio Link Addition Request**, which is transmitted to the DRNC.
    Parameters: target cell ID.

2. The DRNC allocates radio resources for the new radio link and requests the target Node B to establish a new radio link by transmitting a NBAP message **Radio Link Setup Request.**
    Parameters: HS-DSCH Information and HS-PDSCH RL ID no HSDPA-specific parameters.

3. The target Node B allocates resources, starts physical layer reception on the DPCH on the new radio link and responds with the NBAP message **Radio Link Setup Response**.
Parameters: no HSDPA-specific paramters.~~HS-DSCH Information Response.~~

4. The DRNC responds to the SRNC with the RNSAP message **Radio Link Addition Response** and the DCH transport bearer is established.

5. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iub~~r~~ Data Transport Bearer to the DCH.

6. In case of no combination in the DRNC, T~~t~~he SRNC initiates set-up of a new Iur Data Transport Bearer~~s~~ using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the DCH.

7. As the next step, the SRNC prepares the RNSAP message **Radio Link Reconfiguration Prepare** which is transmitted to the DRNC.
Parameters: ~~HS-DSCH information, and~~ SRNC selected HS-PDSCH RL ID.

8. The DRNC requests the source HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, removing its HS-DSCH resources for the source HS-DSCH radio link.
Parameters: ~~HS-DSCH Information~~ HS-DSCH MAC-d Flows To Delete~~, a DRNC allocated HS-DSCH-RNTI and HS-PDSCH RL ID~~.

9. The source HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
Parameters: ~~HS-DSCH Information Response~~no HSDPA-specific parameters.

10. The DRNC requests the target HS-DSCH Node B to perform a synchronised radio link reconfiguration using the NBAP message **Radio Link Reconfiguration Prepare**, adding HS-DSCH resources for the target HS-DSCH radio link.
Parameters: HS-DSCH information including an HS-PDSCH RL ID and a DRNC selected HS-DSCH RNTI.

11. The target HS-DSCH Node B returns the NBAP message **Radio Link Reconfiguration Ready**.
Parameters: HS-DSCH Information Response.

12. The DRNC returns the RNSAP message **Radio Link Reconfiguration Ready** to the SRNC.
Parameters: HS-DSCH information response and the DRNC selected HS-DSCH-RNTI.

13. The DRNC initiates set-up of a new Iub Data Transport Bearers using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iu~~r~~b Data Transport Bearer to the HS-DSCH.

14. The S~~D~~RNC may initiate~~s~~ set-up of a new Iur Data Transport Bearer~~s~~ using ALCAP protocol. This request contains the AAL2 Binding Identity to bind the Iur Data Transport Bearer to the HS-DSCH.

15. The HS-DSCH transport bearer to the target HS-DSCH Node B is established. The SRNC proceeds by transmitting the RNSAP message **Radio Link Reconfiguration Commit** to the DRNC including an SRNC selected activation time in the form of a CFN.
Parameters: SRNC selected activation time in the form of a CFN.

16. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the source HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
Parameters: SRNC selected activation time in the form of a CFN.

17. The DRNC transmits a NBAP message **Radio Link Reconfiguration Commit** to the target HS-DSCH Node B including the activation time. At the indicated activation time the source HS-DSCH Node B stops and the target HS-DSCH Node B starts transmitting on the HS-DSCH to the UE.
Parameters: SRNC selected activation time in the form of a CFN

18. The SRNC also transmits a RRC message **Physical Channel Reconfiguration** to the UE.
Parameters: activation time, DPCH information for the target cell, MAC-hs reset indicator, serving HS-DSCH radio link indicator, HS-SCCH set info and H-RNTI.

19. At the indicated activation time the UE abandons the current active set and initiates establishment of the DPCH in the target cell. When physical layer synchronisation is established in the target cell, it starts DPCH reception and

transmission and HS-DSCH reception in the target cell. The UE returns the RRC message **Physical Channel Reconfiguration Complete** to the SRNC.

20. The DRNC initiates release of the old Iub Data Transport bearer to the source HS-DSCH Node B using ALCAP protocol.

21. If a new Iur Data Transport Bearer was set up in 14. then Tthe SRNC initiates release of the old Iur Data Transport bearer using ALCAP protocol.

22. The SRNC then finalises the procedure by transmitting the RNSAP message **Radio Link Deletion Request** to the DRNC.
    In the message the source cell to be deleted is identified.
    Parameters: RL ID.

23. The DRNC transmits the NBAP message **Radio Link Deletion Request** to the source Node B.
    Parameters: RL ID.

24. The source Node B releases resources for the source radio link and returns the NBAP message **Radio Link Deletion Response** to the DRNC.

25. The DRNC returns the RNSAP message **Radio Link Deletion Response** to the SRNC.

26. The DRNC initiates release of the old Iub DCH Transport bearer to the source HS-DSCH Node B using ALCAP protocol.

27. If a new Iur Data Transport Bearer was set up in 6. then Tthe SRNC initiates release of the old Iur DCH Transport bearer using ALCAP protocol.

***************************** END of modification ***