RP-020741

TSG RAN Meeting #18 New Orleans, Louisiana, USA, 3 - 6 December, 2002

TitleCRs (R99 and Rel-4/Rel-5 Category A) to TS 25.413SourceTSG RAN WG3Agenda Item7.3.3

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-022597	25.413	3.11.1	3.12.0	R99	527	2	F	Correction of RAB Subflows and SRBs mapping onto the transport channel identifiers of Iur in the Source RNC to Target RNC transparent container	TEI
R3-022598	25.413	4.6.0	4.7.0	REL-4	528	2	A Correction of RAB Subflows and SRBs mapping onto the transport channel identifiers of lur in the Source RNC to Target RNC transparent container		TEI
R3-022599	25.413	5.2.0	5.3.0	REL-5	529	2	A	Correction of RAB Subflows and SRBs mapping onto the transport channel identifiers of Iur in the Source RNC to Target RNC transparent container	TEI
R3-022541	25.413	3.11.1	3.12.0	R99	530	1	F	Correction of coding of GSM IEs	TEI
R3-022542	25.413	4.6.0	4.7.0	REL-4	531	1	А	Correction of coding of GSM IEs	TEI
R3-022543	25.413	5.2.0	5.3.0	REL-5	532	1	A	Correction of coding of GSM IEs	TEI

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

Tdoc #R3-022597

ж	<mark>25.4</mark>	13	CR	527	ж rev	2	ж	Current vers	^{sion:} 3.11.	1 [#]
For <u>HELP</u> (on usi	ing this	s form, see	bottom of ti	his page or	· look a	at the	e pop-up text	tover the ¥ s	ymbols.
Proposed chan	Proposed change affects: UICC apps # ME Radio Access Network X Core Network									
Title:	ж	Corre of lur	ction of RA in the Sour	B Subflows ce RNC to	and SRBs Target RN(mapp C trans	oing c spare	onto the trans ent container	sport channel	identifiers
Source:	ж	RAN	WG3							
Work item code	e: #	TEI						Date: #	11/11/2002	2
Category:	¥ L D	F Jse <u>one</u> A B C D Detailed e foun	e of the follo (correction) (correspond (addition of (functional m (editorial mo d explanation d in 3GPP <u>1</u>	wing categor ls to a correc feature), nodification o odification) ns of the abo R 21.900.	ries: tion in an ea of feature) ve categorie	arlier re	elease	Release: # Use <u>one</u> of 2 (e) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	R99 f the following r (GSM Phase (Release 199 (Release 199 (Release 199 (Release 199 (Release 4) (Release 5) (Release 6)	eleases: 2) 6) 7) 8) 9)
Reason for cha	inge:	ж	- In cas how t transp be red the ta for th	se of UE not to map the re port channels ceived from t rget RNC mu e SRBs.	involved rel ceived RAE identifiers he Source F ust know wh	Suflo Suflo used ov NC to iich Iur	n, the w for ver Iu Targ	a given indic a given indic ir by the SRN get RNC trans sport channel	nust know from ated domain or C. This inform parent containe identifier the S	n RANAP nto the nation must er. Similarly, RNC uses
Summary of ch	ange.	: 34 T n c f(<u>l</u>	The Source lecessary in thannel ider One protocco or the TrCH mpact asse elease):	RNC to Tan formation of htifier of lur. l extension H-ID IE . essment tow	rget RNC to of RAB Sub has been a <u>vards the p</u>	ranspa oflow a added reviou:	arent and S for t s ver	container is RBs mappir he RAB-TrC sion of the s	corrected to ing onto the tra	nclude the insport and also same
		ר (This CR has same relea	s isolated in ise) becaus	pact towa	rds the 1 has	e pre char	vious version nged.	n of the specil	fication
		T	This CR has	s an impact	under fund	tional	and	protocol poi	nt of view.	
		T W	The impact vithout UE i	can be cons nvolved sys	sidered iso stem functio	lated bon.	becau	use it only af	fects the reloo	cation

i.

ī.

Consequences if not approved:	The relocation with UE not involved does not work.						
Clauses affected:	₩ 8.6.2, 9.2.1.28, 9.3.4, 9.3.6 ▼ N						
Other specs affected:	Image: Non-Structure Image: Non-Structure <td< th=""></td<>						
Other comments:	ж						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

8.6.2 Successful Operation



Figure 5: Relocation Preparation procedure. Successful operation.

The source RNC shall initiate the procedure by generating RELOCATION REQUIRED message. The source RNC shall decide whether to initiate the intra-system Relocation or the 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 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".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of UE. The source RNC shall set the *Relocation Type* IE accordingly 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 signalling connections existing for the UE by setting correctly the *Number of Iu Instances* IE.

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 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 security mode control procedure has been successfully performed and the associated *Chosen Encryption Algorithm* IE that has been selected for this domain.

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 <u>Source RNC-to-Target RNC transparent container IE</u> container 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) or USCH(s), the Source RNC to Target RNC Transparent Container IE shall:

- -for each RAB include the RAB ID, the CN Domain Indicator IE and include 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) or USCH(s), the DSCH ID(s) or USCH ID(s) 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 *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* IE within the RELOCATION REQUIRED message only if the information is available.

The source RNC shall send the RELOCATION REQUIRED message to the CN and the source RNC 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 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.

For each RAB successfully established in the target system and originating from the PS domain, the RELOCATION COMMAND message shall contain Iu transport address and Iu transport association 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 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 RELOCATION COMMAND message the source RNC shall stop the timer $T_{RELOCprep}$, RNC shall start the timer $T_{RELOCOverall}$ and RNC shall terminate the Relocation Preparation procedure. The source RNC is then defined to have a Prepared Relocation for that Iu signalling connection.

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

Interactions with other procedures:

If, after RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating an other 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 Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of 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 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.

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 the case the relocation is cancelled the RNC shall resume any suspended procedures (if any).

After Relocation Preparation procedure is terminated successfully, 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.

9.2.1.28 Source RNC to Target RNC Transparent Container

Source RNC to Target RNC Transparent Container IE is an information element that is produced by source RNC and is transmitted to target RNC. In inter-system handover the IE is transmitted from external relocation source to target RNC.

This IE is transparent to CN.

	IE/Group Name	Prese nce	Range	IE type and reference	Semantics description	<u>Criticality</u>	Assigned Criticality
l	RRC Container	М		OCTET		2	
l	Number of lu Instances	М		INTEGER (12)		Ξ	
I	Relocation Type	М		9.2.1.23		-	
İ	Chosen Integrity Protection Algorithm	0		9.2.1.13	Indicates the integrity protection algorithm.		
ļ	Integrity Protection Key	0		Bit String (128)		=	
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of signalling data.	=	
l	Ciphering Key	0		Bit String (128)		=	
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of CS user data.	Ξ	
	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of PS user data.	Ξ	
	d-RNTI	C - ifUEno tinvolv ed		INTEGER (010485 75)		-	
	Target Cell ID	C - ifUEinv olved		INTEGER (026843 5455)	This information element identifies a cell uniquely within UTRAN and consists of RNC-ID (12 bits) and C- ID (16 bits) as defined in TS 25.401 [3].	1	
	RAB TrCH Mapping	0	1 to <maxnoo fRABs></maxnoo 			=	
I	>RAB ID	М		9.2.1.2		=	
	>RAB Subflow	M	1 to <maxra B- Subflows ></maxra 		The RAB Subflows shall be presented in an order that corresponds to the order in which the RBs are presented per RAB in the RRC container included in this IE.	=	
ļ	>> Transport Channel IDs					=	
	>>> DCH ID	0		INTEGER (0255)	The DCH ID is the identifier of an active dedicated transport channel over lur. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	Ξ	
	>>> DSCH ID	0		INTEGER (0255)	The DSCH ID is the identifier of an active downlink shared transport channel <u>over lur</u> . It is unique for each DSCH among the active DSCHs simultaneously allocated for the same UE.	=	
	>>> USCH ID	0		INTEGER (0255)	The USCH ID is the identifier of an active uplink shared transport channel <u>over lur</u> . It is unique for each USCH among the active USCHs simultaneously allocated	=	

				for the same UE.		
<u>>CN Domain</u> Indicator	M		<u>9.2.1.5</u>		<u>YES</u>	Ignore
SRB TrCH Mapping	<u>0</u>	<u>1 to</u> <u><maxnoo< u=""> <u>fSRBs></u></maxnoo<></u>			<u>GLOBAL</u>	<u>Reject</u>
<u> </u>	M		<u>INTEGER</u> (132)	The SRB ID is the absolute value of the SRB.	Ξ	
<u>>DCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The DCH ID is the identifier of an active dedicated transport channel over lur. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	Ξ	
<u>>DSCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The DSCH ID is the identifier of an active downlink shared transport channel over lur. It is unique for each DSCH among the active DSCHs simultaneously allocated for the same UE.	Ξ	
<u>>USCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The USCH ID is the identifier of an active uplink shared transport channel over lur. It is unique for each USCH among the active USCHs simultaneously allocated for the same UE.	Ξ	

Condition	Explanation
IfUEnotinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE not involved in relocation of SRNS".
IfUEinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE involved in relocation of SRNS".

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.
maxRABSubflows	Maximum no. of subflows per RAB. Value is 7.
maxnoofSRBs	Maximum no. of SRBs per RAB. Value is 8.

	9.3.4 Information Element Definitions

	 Information Element Definitions

	RANAP-IEs { itu-t (0) identified-organization (4) etsi (0) mobileDomain (0) umts-Access (20) modules (3) ranap (0) version1 (1) ranap-IEs (2) }
	DEFINITIONS AUTOMATIC TAGS ::=
	BEGIN
	<pre>IMPORTS maxNrOfErrors, maxNrOfPDPDirections, maxNrOfPoints, maxNrOfRABs, maxNrOfSRBs, maxNrOfSeparateTrafficDirections, maxRAB-Subflows, maxRAB-SubflowCombination, maxNrOfLevels,</pre>
	id-CN-DomainIndicator, id-MessageStructure, id-SRB-TrCH-Mapping, id-TypeOfError
	FROM RANAP-CONStants
	Unchanged text is removed
	RAB-SubflowCombinationBitRate ::= INTEGER (016000000)
	RAB-TrCH-Mapping ::= SEQUENCE (SIZE (1maxNrOfRABs)) OF RAB-TrCH-MappingItem
 	<pre>RAB-TrCH-MappingItem ::= SEQUENCE { rAB-ID RAB-ID, trCH-ID-List TrCH-ID-List, iE-Extensions ProtocolExtensionContainer { RAB-TrCH-MappingItem-ExtIEs } OPTIONAL, }</pre>
	RAB-TrCH-MappingItem-ExtIES RANAP-PROTOCOL-EXTENSION ::= { Extension for Release 99 to enable transfer of RAB Subflow mapping onto Iur transport channel Ids for a given indicated domain { ID id-CN-DomainIndicator CRITICALITY ignore EXTENSION CN-DomainIndicator

```
}
```

Unchanged text is removed

```
SourceRNC-ID ::= SEQUENCE {
    pLMNidentity
                                PLMNidentity,
    rNC-ID
                        RNC-ID,
                            ProtocolExtensionContainer { {SourceRNC-ID-ExtIEs} } OPTIONAL
    iE-Extensions
SourceRNC-ID-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    . . .
SourceRNC-ToTargetRNC-TransparentContainer ::= SEQUENCE {
    rRC-Container
                            RRC-Container.
    numberOfIuInstances
                           NumberOfIuInstances,
    relocationType
                            RelocationType,
    chosenIntegrityProtectionAlgorithm ChosenIntegrityProtectionAlgorithm
                                                                           OPTIONAL,
    integrityProtectionKey
                                IntegrityProtectionKey
                                                                OPTIONAL,
    chosenEncryptionAlgorithForSignalling ChosenEncryptionAlgorithm
                                                                        OPTIONAL,
    cipheringKey
                            EncryptionKey
                                                        OPTIONAL,
    chosenEncryptionAlgorithForCS
                                    ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
    chosenEncryptionAlgorithForPS ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
    d-RNTI
                        D-RNTI
                                                OPTIONAL
    -- This IE shall be present if the Relocation type IE is set to "UE not involved in relocation of SRNS"--,
                            TargetCellId
    targetCellId
                                                        OPTIONAL
    -- This IE shall be present if the Relocation type IE is set to "UE involved in relocation of SRNS"--,
    rAB-TrCH-Mapping
                                RAB-TrCH-Mapping
                                                                OPTIONAL,
                            ProtocolExtensionContainer { {SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs } OPTIONAL,
    iE-Extensions
    . . .
SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 99 to enable transfer of SRB mapping onto Iur transport channel Ids --
       ID id-SRB-TrCH-Mapping CRITICALITY reject
                                                        EXTENSION SRB-TrCH-Mapping PRESENCE optional },
    . . .
SourceStatisticsDescriptor ::= ENUMERATED {
    speech,
    unknown,
    . . .
SRB-ID ::= INTEGER (1..32)
SRB-TrCH-Mapping ::=
                        SEQUENCE ( SIZE (1..maxNrOfSRBs)) OF
    SRB-TrCH-MappingItem
SRB-TrCH-MappingItem ::= SEQUENCE {
    sRB-ID
                    SRB-ID,
```

iE-Extensions	ProtocolExtensionContainer { { SRB-TrCH-MappingItem-ExtIEs} }	OPTION
<u></u>		
Ţ		
SRB-TrCH-MappingItem-E	xtIEs RANAP-PROTOCOL-EXTENSION ::= {	
}		
<u> </u>		
SubflowSDII_Size	$\cdot \cdot - \operatorname{INTEGED}(0, 4005)$	
Unit is bit	··- INTEGER (04093)	
The share word the set of a second		
Unchanged text is remu	ved	
TransportLayerAddress	::= BIT STRING (SIZE (1160,))	
TrCH-ID ::= SEQUENCE {		
dCH-ID	DCH-ID OPTIONAL,	
dSCH-ID	DSCH-ID OPTIONAL,	
iE-Extensions	USCH-ID OPTIONAL, ProtocolExtensionContainer { { TrCH-ID-ExtIEs} } OPTIONAL	
···		
}		
TAUL ID East IES DANAD I	DOTOGOL EVTENDION ··- (
IICH-ID-EXCIES RANAP-P	ROTOCOL-EXTENSION ··· = {	
}		
TrCH-ID-List ::= SFOT	IFNCE (SIZE (1 maxRAB-Subflows)) OF	
TrCH-ID	DIGE (012E (1maximp-Sublidws/) Or	
TriggerID	::= OCTET STRING (SIZE (322))	

9.3.6	Constant Definiti	ons	
********* 	* * * * * * * * * * * * * * * * * * * *	**********************	* * * * * * *
Constant	definitions		
********	* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* * * * * * *
RANAP-Consta itu-t (0) id umts-Access	nts { entified-organization (20) modules (3) ranag	(4) etsi (0) mobileDomai (0) versionl (1) ranap-	n (0) Constants (4) }
DEFINITIONS .	AUTOMATIC TAGS ::=		
BEGIN			
********	* * * * * * * * * * * * * * * * * * * *	*****	* * * * * * *
Elementar	y Procedures		
*******	******	********	* * * * * * *
id-RAB-Assig	nment	INTEGER ::= 0	
id-Iu-Releas	e	INTEGER ::= 1	
id-Relocatio	nPreparation	INTEGER ::= 2	
id-Relocatio	nResourceAllocation	INTEGER ::= 3	
id-Relocatio	nCancel	INTEGER ::= 4	
id-SRNS-Cont	extTransfer	INTEGER ::= 5	
id-SecurityM	odeControl	INTEGER ::= 6	
id-DataVolum	eReport	INTEGER ::= 7	
id-Reset	-	INTEGER ::= 9	
id-RAB-Relea	seRequest	INTEGER ::= 10	
id-Iu-Releas	eRequest	INTEGER ::= 11	
id-Relocatio	nDetect	INTEGER ::= 12	
id-Relocatio	nComplete	INTEGER ::= 13	
id-Paging	-	INTEGER ::= 14	
id-CommonID		INTEGER ::= 15	
id-CN-Invoke	Trace	INTEGER ::= 16	
id-LocationR	eportingControl	INTEGER ::= 17	
id-LocationR	eport	INTEGER ::= 18	
id-InitialUE	-Message	INTEGER ::= 19	
id-DirectTra	nsfer	INTEGER ::= 20	
id-OverloadC	ontrol	INTEGER ::= 21	
id-ErrorIndi	cation	INTEGER ::= 22	
id-SRNS-Data	Forward	INTEGER ::= 23	
id-ForwardSR	NS-Context	INTEGER ::= 24	
id-privateMe	ssage	INTEGER ::= 25	
id-CN-Deacti	vateTrace	INTEGER ::= 26	
id-ResetReso	urce	INTEGER ::= 27	
		TNUEGED 00	

-- Extension constants

3GPP

____ ***** maxPrivateIEs INTEGER ::= 65535 maxProtocolExtensions INTEGER ::= 65535 INTEGER ::= 65535 maxProtocolIEs ___ -- Lists ___ maxNrOfDTs INTEGER ::= 15 maxNrOfErrors INTEGER ::= 256 INTEGER ::= 250 maxNrOfIuSigConIds maxNrOfPDPDirections INTEGER ::= 2maxNrOfPoints INTEGER ::= 15 maxNrOfRABs INTEGER ::= 256 maxNrOfSeparateTrafficDirections INTEGER ::= 2 maxNrOfSRBs INTEGER ::= 8 maxNrOfVol INTEGER ::= 2 maxNrOfLevels INTEGER ::= 256 maxRAB-Subflows INTEGER ::= 7maxRAB-SubflowCombination INTEGER ::= 64 ___ -- IEs ___ id-AreaIdentity INTEGER ::= 0 id-CN-DomainIndicator INTEGER ::= 3 id-Cause INTEGER ::= 4 id-ChosenEncryptionAlgorithm INTEGER ::= 5 id-ChosenIntegrityProtectionAlgorithm INTEGER ::= 6 id-ClassmarkInformation2 INTEGER ::= 7 id-ClassmarkInformation3 INTEGER ::= 8 id-CriticalityDiagnostics INTEGER ::= 9 id-DL-GTP-PDU-SequenceNumber INTEGER ::= 10 id-EncryptionInformation INTEGER ::= 11 id-IntegrityProtectionInformation INTEGER ::= 12 id-IuTransportAssociation INTEGER ::= 13 id-L3-Information INTEGER ::= 14 id-LAI INTEGER ::= 15 id-NAS-PDU INTEGER ::= 16 id-NonSearchingIndication INTEGER ::= 17 id-NumberOfSteps INTEGER ::= 18 id-OMC-ID INTEGER ::= 19 INTEGER ::= 20 id-OldBSS-ToNewBSS-Information INTEGER ::= 21 id-PagingAreaID id-PagingCause INTEGER ::= 22 id-PermanentNAS-UE-ID INTEGER ::= 23 id-RAB-ContextItem INTEGER ::= 24

id-RAB-ContextList	INTEGER ::= 25
id-RAB-DataForwardingItem	INTEGER ::= 26
id-RAB-DataForwardingItem-SRNS-CtxReq	INTEGER ::= 27
id-RAB-DataForwardingList	INTEGER ::= 28
id-RAB-DataForwardingList-SRNS-CtxReq	INTEGER ::= 29
id-RAB-DataVolumeReportItem	INTEGER ::= 30
id-RAB-DataVolumeReportList	INTEGER ::= 31
id-RAB-DataVolumeReportRequestItem	INTEGER ::= 32
id-RAB-DataVolumeReportRequestList	INTEGER ::= 33
id-RAB-FailedItem	INTEGER ::= 34
id-RAB-FailedList	INTEGER ::= 35
id-RAB-ID	INTEGER ::= 36
id-RAB-OueuedItem	INTEGER ::= 37
id-RAB-OueuedList	INTEGER ::= 38
id-RAB-ReleaseFailedList	INTEGER ::= 39
id-RAB-ReleaseItem	INTEGER ::= 40
id-RAB-ReleaseList	INTEGER ::= 41
id-RAB-ReleasedItem	INTEGER ::= 42
id-RAB-ReleasedList	INTEGER $::= 43$
id-RAB-ReleasedList-TuRelComp	INTEGER $::= 44$
id-RAB-RelocationReleaseItem	INTEGER ::= 45
id-RAB-RelocationReleaseList	INTEGER $::= 46$
id-RAB-SetupItem-RelocReg	INTEGER ::= 47
id-RAB-SetupItem-RelocReglack	INTEGER $::= 48$
id_PAR_Setuplist_PelocReg	INTEGER ··- 49
id_PAR_Setuplist_RelocReglack	INTEGER ··- 50
id_PAR_SetupOrModifiedItem	INTEGER ··- 51
id_PAR_SetupOrModifiedList	INTEGER ··- 52
id-PAR-SetupOrModifiedList	INIEGER ··- 52
id DAD SetupOrModifyItem	INTEGER ··= 55
id-RAB-SetuporModilyList	INIEGER ··= 54
id PoloastionTrme	INTEGER ··- 55
id Demostration	INTEGER ··= 50
id_sat	INIEGER ··= 57
IU-SAI	INTEGER ··- 50
IU-SAPI	INTEGER ··= 59
Id-SourceID	INTEGER ··= 60
id-SourceRNC-ToTargetRNC-TransparentContainer	INTEGER ::= 61
id-TargetID	INTEGER ::= 62
1d-TargetRNC-ToSourceRNC-TransparentContainer	INTEGER ::= 63
1d-TemporaryUE-ID	INTEGER ::= 64
id-TraceReference	INTEGER := 65
id-TraceType	INTEGER ::= 66
1d-TransportLayerAddress	INTEGER ::= 67
id-TriggerID	INTEGER ::= 68
id-UE-ID	INTEGER ::= 69
id-UL-GTP-PDU-SequenceNumber	INTEGER ::= 70
id-RAB-FailedtoReportItem	INTEGER ::= 71
id-RAB-FailedtoReportList	INTEGER ::= 72
id-KeyStatus	INTEGER ::= 75
id-DRX-CycleLengthCoefficient	INTEGER ::= 76
id-IuSigConIdList	INTEGER ::= 77
id-IuSigConIdItem	INTEGER ::= 78
id-IuSigConId	INTEGER ::= 79
${\tt id-DirectTransferInformationItem-RANAP-RelocInf}$	INTEGER ::= 80
id-DirectTransferInformationList-RANAP-RelocInf	INTEGER ::= 81
id-RAB-ContextItem-RANAP-RelocInf	INTEGER ::= 82

Release	1999
---------	------

id-RAB-ContextList-RANAP-RelocInf	INTEGER	::=	83
id-RAB-ContextFailedtoTransferItem	INTEGER	::=	84
id-RAB-ContextFailedtoTransferList	INTEGER	::=	85
id-GlobalRNC-ID	INTEGER	::=	86
id-RAB-ReleasedItem-IuRelComp	INTEGER	::=	87
id-MessageStructure	INTEGER	::=	88
id-TypeOfError	INTEGER	::=	93
id-SRB-TrCH-Mapping	INTEGER	::=	98

END

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

Tdoc #R3-022598

		(CHANG	SE REC	UE	ST				CR-Form-v7
^ж 25.	<mark>413</mark>	CR	528	жrev	2	ж	Current vers	sion:	4.6.0	ж
For <u>HELP</u> on L	ising ti	his form, see	bottom of	this page o	· look a	at the	e pop-up text	over	the X syn	mbols.
Proposed change	affect	s: UICC a	pps#	ME	Rac	lio A	ccess Netwo	rk X	Core Ne	etwork
Title: ೫	Corr of Iu	rection of RA Ir in the Sou	B Subflows	s and SRBs Target RN0	mapp C trans	oing o spare	onto the trans ent container.	sport o	channel id	entifiers
Source: ೫	RAN	WG3								
Work item code: ℜ	TEI						<i>Date:</i> ೫	11/	11/2002	
Category: #	A Use <u>c</u> F E C Detail be fou	ene of the follo (correction) (correspond (addition of (functional m ed explanatio und in 3GPP - - In ca how trans be re the ta for th	owing catego ds to a corre feature), modification odification) ns of the ab <u>FR 21.900</u> . se of UE no to map the r port channel ceived from arget RNC n he SRBs.	ories: ction in an ea of feature) ove categorie t involved re- eceived RAE Is identifiers the Source F nust know wh	arlier re es can Suflo used or NC to ich Iun	n, the w for ver Iu Targ	Release: # Use <u>one</u> of 2 e) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6 e target RNC n r a given indica ur by the SRN0 get RNC transport channel	Rel the fo (GSM (Rele (Rele (Rele (Rele (Rele (Rele C. Th parent identif	I-4 Mollowing rele A Phase 2) pase 1996) pase 1997) pase 1998) pase 1999) pase 4) pase 5) pase 6) now from Homain onto is informat container.	eases: RANAP o the ion must Similarly, NC uses
Summary of chang	ye:₩	The Source necessary i channel ide One protoc for the TrCl <u>Impact asse</u> release): This CR ha (same release) This CR ha This CR ha	RNC to Ta nformation entifier of lui ol extension H-ID IE . essment to ase) becaus is an impact can be cor involved sy	arget RNC t of RAB Sub r. n has been wards the p mpact towa se the ASN et under func- nsidered iso	ranspa oflow a added reviou rds the 1 has ctional lated b on.	arent and S for t s ver char and peca	t container is SRBs mappin the RAB-TrCl rsion of the sp evious version nged. protocol poir use it only aff	correg g onto H-Maj <u>pecific</u> a of th at of v	cted to inc o the trans pping IE a <u>cation (sau</u> le specifica iew. the relocat	clude the sport and also <u>me</u> ation

Consequences if not approved:	# The relocation with UE not involved does not work.						
Clauses affected:	% 8.6.2, 9.2.1.28, 9.3.4, 9.3.6						
	YN						
Other specs	X Other core specifications XTS 25.413 R99CR 527TS 25.413 REL-5CR 529						
affected:	X Test specifications X O&M Specifications						
Other comments:	X						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

8.6.2 Successful Operation



Figure 5: Relocation Preparation procedure. Successful operation.

The source RNC shall initiate the procedure by generating RELOCATION REQUIRED message. The source RNC shall decide whether to initiate the intra-system Relocation or the 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 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".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of UE. The source RNC shall set the *Relocation Type* IE accordingly 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 signalling connections existing for the UE by setting correctly the *Number of Iu Instances* IE.

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 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 security mode control procedure has been successfully performed and the associated *Chosen Encryption Algorithm* IE that has been selected for this domain.

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 <u>Source RNC-to-Target RNC transparent container IE</u> container 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) or USCH(s), the Source RNC to Target RNC Transparent Container IE shall:

- -for each RAB include the RAB ID, the CN Domain Indicator IE and include 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) or USCH(s), the DSCH ID(s) or USCH ID(s) 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 *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* IE within the RELOCATION REQUIRED message only if the information is available.

The source RNC shall send the RELOCATION REQUIRED message to the CN and the source RNC 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 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.

For each RAB successfully established in the target system and originating from the PS domain, the RELOCATION COMMAND message shall contain Iu transport address and Iu transport association 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 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 RELOCATION COMMAND message the source RNC shall stop the timer $T_{RELOCprep}$, RNC shall start the timer $T_{RELOCOverall}$ and RNC shall terminate the Relocation Preparation procedure. The source RNC is then defined to have a Prepared Relocation for that Iu signalling connection.

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

Interactions with other procedures:

If, after RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating an other 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 Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of 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 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.

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 the case the relocation is cancelled the RNC shall resume any suspended procedures (if any).

After Relocation Preparation procedure is terminated successfully, 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.

9.2.1.28 Source RNC to Target RNC Transparent Container

Source RNC to Target RNC Transparent Container IE is an information element that is produced by source RNC and is transmitted to target RNC. In inter-system handover the IE is transmitted from external relocation source to target RNC.

This IE is transparent to CN.

	IE/Group Name	Prese nce	Range	IE type and reference	Semantics description	<u>Criticality</u>	Assigned Criticality
l	RRC Container	М		OCTET		2	1
l	Number of lu Instances	М		INTEGER (12)		=	=
I	Relocation Type	М		9.2.1.23		-	-
İ	Chosen Integrity Protection Algorithm	0		9.2.1.13	Indicates the integrity protection algorithm.		
l	Integrity Protection Key	0		Bit String (128)		2	Ξ.
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of signalling data.	Ξ	2
l	Ciphering Key	0		Bit String (128)		=	=
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of CS user data.	Ξ	Ξ
	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of PS user data.	1	11
ļ	d-RNTI	C - ifUEno tinvolv ed		INTEGER (010485 75)		Ξ	-
	Target Cell ID	C - ifUEinv olved		INTEGER (026843 5455)	This information element identifies a cell uniquely within UTRAN and consists of RNC-ID (12 bits) and C-ID (16 bits) as defined in TS 25.401 [3].	-	1
	RAB TrCH Mapping	0	1 to <maxnoo fRABs></maxnoo 			Ξ	Ξ
l	>RAB ID	М		9.2.1.2		=	=
	>RAB Subflow	М	1 to <maxra B- Subflows ></maxra 		The RAB Subflows shall be presented in an order that corresponds to the order in which the RBs are presented per RAB in the RRC container included in this IE.	-	11
	>> Transport Channel IDs					2	2
	>>> DCH ID	0		INTEGER (0255)	The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	2	-
	>>> DSCH ID	0		INTEGER (0255)	The DSCH ID is the identifier of an active downlink shared transport channel. It is unique for each DSCH among the active DSCHs simultaneously allocated for the same UE.	-	-
ļ	>>> USCH ID	0		INTEGER (0255)	The USCH ID is the identifier of an active uplink shared transport channel. It is unique for each USCH among the active USCHs simultaneously	Ξ	Ξ

				allocated for the same UE.		
>CN Domain Indicator	M		<u>9.2.1.5</u>		<u>YES</u>	<u>Ignore</u>
SRB TrCH Mapping	<u>0</u>	<u>1 to</u> <u><maxnoo< u=""> <u>fSRBs></u></maxnoo<></u>			<u>GLOBAL</u>	<u>Reject</u>
<u>>SRB ID</u>	M		<u>INTEGER</u> (132)	The SRB ID is the absolute value of the SRB.	1	
<u>>DCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The DCH ID is the identifier of an active dedicated transport channel over lur. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	Ξ	
<u>>DSCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The DSCH ID is the identifier of an active downlink shared transport channel over lur. It is unique for each DSCH among the active DSCHs simultaneously allocated for the same UE.	Ξ	
<u>>USCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The USCH ID is the identifier of an active uplink shared transport channel over lur. It is unique for each USCH among the active USCHs simultaneously allocated for the same UE.	Ξ	

Condition	Explanation
IfUEnotinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE not
	involved in relocation of SRNS".
IfUEinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE
	involved in relocation of SRNS".

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.
maxRABSubflows	Maximum no. of subflows per RAB. Value is 7.
maxnoofSRBs	Maximum no. of SRBs per RAB. Value is 8.

9.3.4	Information Element Definitions
******	***************************************
 Informa	ation Element Definitions
 ******	***************************************
RANAP-IES itu-t (0) umts-Acces	{ identified-organization (4) etsi (0) mobileDomain (0) ss (20) modules (3) ranap (0) versionl (1) ranap-IEs (2) }
DEFINITION	NS AUTOMATIC TAGS ::=
BEGIN	
IMPORTS maxNrC maxNrC maxNrC maxNrC maxNrC maxRAE maxRAE maxRAE maxRAE maxRAE maxRAE maxRAE maxNrC FRA FRA FRA FRA FRA FRA FRA FRA FRA FRA	DfErrors, DfPDDPirections, DfPoints, DfRABs, DfSRBs, DfSRBs, 3-Subflows, 3-Subflows, 3-Subflows, 3-Subflows, 0fLevels, DfLevels, DfAltValues, -DomainIndicator, ssageStructure, 3-TrCH-Mapping, peOfError P-Constants
<u>Unchanged</u>	text is removed
RAB-Subflo	<pre>owCombinationBitRate := INTEGER (016000000)</pre>
RAB-TrCH-N RAB-Tr	Mapping ::= SEQUENCE (SIZE (1maxNrOfRABs)) OF rCH-MappingItem
RAB-TrCH-M rAB-II trCH-J <u>iE-Ext</u>	MappingItem ::= SEQUENCE { D RAB-ID, ID-List TrCH-ID-List, tensions ProtocolExtensionContainer { { RAB-TrCH-MappingItem-ExtIEs} } OPTIONAL,
RAB-TrCH-M Extensi { II	MappingItem-ExtIES RANAP-PROTOCOL-EXTENSION ::= { ion for Release 99 to enable transfer of RAB Subflow mapping onto Iur transport channel Ids for a given indicated domain D id-CN-DomainIndicator CRITICALITY ignore EXTENSION CN-DomainIndicator PRESENCE optional},

Unchanged text is removed

```
}
```

```
SourceRNC-ID ::= SEQUENCE {
    pLMNidentity
                                PLMNidentity,
    rNC-ID
                        RNC-ID,
    iE-Extensions
                            ProtocolExtensionContainer { {SourceRNC-ID-ExtIEs} } OPTIONAL
ļ
SourceRNC-ID-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    . . .
SourceRNC-ToTargetRNC-TransparentContainer ::= SEQUENCE {
    rRC-Container
                            RRC-Container,
    numberOfIuInstances
                            NumberOfIuInstances.
    relocationType
                            RelocationType,
    chosenIntegrityProtectionAlgorithm ChosenIntegrityProtectionAlgorithm OPTIONAL,
    integrityProtectionKey
                                IntegrityProtectionKey
                                                                OPTIONAL,
    chosenEncryptionAlgorithForSignalling ChosenEncryptionAlgorithm
                                                                        OPTIONAL,
    cipheringKey
                            EncryptionKey
                                                        OPTIONAL,
    chosenEncryptionAlgorithForCS ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
    chosenEncryptionAlgorithForPS ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
    d-RNTI
                        D-RNTI
                                                OPTIONAL
    -- This IE shall be present if the Relocation type IE is set to "UE not involved in relocation of SRNS" --,
                            TargetCellId
    targetCellId
                                                        OPTIONAL
    -- This IE shall be present if the Relocation type IE is set to "UE involved in relocation of SRNS" --,
    rAB-TrCH-Mapping
                                RAB-TrCH-Mapping
                                                                OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { {SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs } } OPTIONAL,
    . . .
SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 99 to enable transfer of SRB mapping onto Iur transport channel Ids --
       ID id-SRB-TrCH-Mapping CRITICALITY reject EXTENSION SRB-TrCH-Mapping PRESENCE optional },
    . . .
SourceStatisticsDescriptor ::= ENUMERATED {
    speech,
    unknown,
    . . .
SRB-ID ::= INTEGER (1..32)
SRB-TrCH-Mapping ::= SEQUENCE ( SIZE (1..maxNrOfSRBs)) OF
    SRB-TrCH-MappingItem
SRB-TrCH-MappingItem ::= SEQUENCE {
                    SRB-ID,
    sRB-ID
    trCH-ID
                    TrCH-ID,
                            ProtocolExtensionContainer { { SRB-TrCH-MappingItem-ExtIEs } } OPTIONAL,
    iE-Extensions
```

SRB-TrCH-MappingItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
 ...
}

Sub	oflows	SDU-	-Size	
	Unit	is	bit	

::= INTEGER (0..4095)

Unchanged text is removed

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

TrCH-ID ::= SEQUENCE {

. . .

}

{

dCH-ID	DCH-ID	OPTIONAL,				
dSCH-ID	DSCH-ID	OPTIONAL,				
uSCH-ID	USCH-ID	OPTIONAL,				
iE-Extensions	Protoco.	lExtensionContainer {	[{	TrCH-ID-ExtIEs	} }	OPTIONAL

TrcH-ID-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {

TrCH-ID-List ::= SEQUENCE (SIZE (1..maxRAB-Subflows)) OF TrCH-ID

TriggerID ::= OCTET STRING (SIZE (3..22))

9.3.6 Consta	nt Definitions
***********************************	**************************************
***********************************	*********
RANAP-Constants { itu-t (0) identified- umts-Access (20) modu	organization (4) etsi (0) mobileDomain (0) les (3) ranap (0) versionl (1) ranap-Constants (4) }
DEFINITIONS AUTOMATIC	TAGS ::=
BEGIN	
*****************	************
Elementary Procedu	res
**************	**************
id-RAB-Assignment id-Iu-Release id-RelocationPreparat id-RelocationCancel id-SRNS-ContextTransf id-SecurityModeContro id-DataVolumeReport id-RAB-ReleaseRequest id-RAB-ReleaseRequest id-RelocationDetect id-RelocationComplete id-Paging id-CommonID id-CN-InvokeTrace id-LocationReport id-LocationReport id-InitialUE-Message id-DirectTransfer	INTEGER ::= 0 $INTEGER ::= 1$ ion $INTEGER ::= 2$ Allocation $INTEGER ::= 3$ $INTEGER ::= 4$ er $INTEGER ::= 5$ I $INTEGER ::= 6$ $INTEGER ::= 9$ $INTEGER ::= 9$ $INTEGER ::= 10$ $INTEGER ::= 12$ $INTEGER ::= 12$ $INTEGER ::= 13$ $INTEGER ::= 14$ $INTEGER ::= 16$ ontrol $INTEGER ::= 17$ $INTEGER ::= 16$ $INTEGER ::= 17$ $INTEGER ::= 16$ $INTEGER ::= 17$ $INTEGER ::= 12$ $INTEGER ::= 20$ $INTEGER ::= 20$
id-OverloadControl id-ErrorIndication id-SRNS-DataForward id-ForwardSRNS-Contex id-privateMessage id-CN-DeactivateTrace id-ResetResource id-RANAP-Relocation id-RAB-ModifyRequest id-LocationRelatedDat	INTEGER ::= 21 INTEGER ::= 22 INTEGER ::= 23 t INTEGER ::= 24 INTEGER ::= 25 INTEGER ::= 26 INTEGER ::= 27 INTEGER ::= 28 INTEGER ::= 29 a INTEGER ::= 30

Extension constants			
***********************************	* * * * * * * * * * *	* * * *	* * * * * * * * * * * * * * * * * * *
maxPrivateIEs	INTEGER :	::=	65535
maxProtocolExtensions	INTEGER :	::=	65535
maxProtocolIEs	INTEGER :	::=	65535
****************************	* * * * * * * * * *	* * * *	* * * * * * * * * * * * * * * * * *
Lists			
	***	د د د د	
^^^			
maxNrOfDTs	INTEGER :	::=	15
maxNrOfErrors	INTEGER :	::=	256
maxNrOfTuSigConIds	INTEGER :	::=	250
maxNrOfPDPDirections	INTEGER :	::=	2
maxNrOfPoints	INTEGER	::=	15
maxNrOfPAR	INTEGER .		256
maxNrOffenarateTraffigDirections	INTEGER .		230
maxNr0fSBDg	INTEGER .		2
	INTEGER	=	0
	INIEGER ·	••=	2
maxNrUILevels	INTEGER	••=	256
maxNrOIALtValues	INTEGER :	: : =	16
marDAD Cubfloria	TNTECED		7
maxRAB-Subliows	INIEGER ·	=	
MaxRAB-Subi lowCombination	INIEGER .	••=	04
*********************************	* * * * * * * * * *	* * * *	* * * * * * * * * * * * * * * * * *
IEs			
**********************	* * * * * * * * * *	* * * *	* * * * * * * * * * * * * * * * * *
id-AreaIdentity			INTEGER ::= 0
id-CN-DomainIndicator			INTEGER ::= 3
id-Cause			INTEGER ::= 4
id-ChosenEncryptionAlgorithm			INTEGER ::= 5
id-ChosenIntegrityProtectionAlgorit	hm		INTEGER ::= 6
id-ClassmarkInformation2			INTEGER ::= 7
id-ClassmarkInformation3			INTEGER ::= 8
id-CriticalityDiagnostics			INTEGER ::= 9
id-DL-GTP-PDU-SequenceNumber			INTEGER ::= 10
id-EncryptionInformation			INTEGER ::= 11
id_IntegrityProtectionInformation			INTEGER ··- 12
id_IuTrangportlagogiation			INTEGER \cdots 12
id_I2_Information			INTEGER $\cdots = 13$
			INTEGER $\cdot \cdot = 14$
IQ-LAI			INTEGER ::= 15
10-NAS-PDU			INTEGER := 16
id-NonSearchingIndication			INTEGER ::= $I7$
1d-NumberOfSteps			INTEGER ::= 18
id-OMC-ID			INTEGER ::= 19
id-OldBSS-ToNewBSS-Information			INTEGER ::= 20

id-PagingAreaID	INTEGER ::= 21
id-PagingCause	INTEGER ::= 22
id-PermanentNAS-UE-ID	INTEGER ::= 23
id-RAB-ContextItem	INTEGER ::= 24
id-RAB-ContextList	INTEGER ::= 25
id-RAB-DataForwardingItem	INTEGER ::= 26
id-RAB-DataForwardingItem-SRNS-CtxReq	INTEGER ::= 27
id-RAB-DataForwardingList	INTEGER ::= 28
id-RAB-DataForwardingList-SRNS-CtxReq	INTEGER ::= 29
id-RAB-DataVolumeReportItem	INTEGER ::= 30
id-RAB-DataVolumeReportList	INTEGER ::= 31
id-RAB-DataVolumeReportRequestItem	INTEGER ::= 32
id-RAB-DataVolumeReportRequestList	INTEGER ::= 33
id-RAB-FailedItem	INTEGER ::= 34
id-RAB-FailedList	INTEGER ::= 35
id-RAB-ID	INTEGER ::= 36
id-RAB-OueuedItem	INTEGER ::= 37
id-RAB-OueuedList	INTEGER ::= 38
id-RAB-ReleaseFailedList	INTEGER ::= 39
id-RAB-ReleaseItem	INTEGER ::= 40
id-RAB-ReleaseList	INTEGER ::= 41
id-RAB-ReleasedItem	INTEGER ::= 42
id-RAB-ReleasedList	INTEGER ::= 43
id-RAB-ReleasedList-IuRelComp	INTEGER ::= 44
id-RAB-RelocationReleaseItem	INTEGER ::= 45
id-RAB-RelocationReleaseList	INTEGER ::= 46
id-RAB-SetupItem-RelocReg	INTEGER ::= 47
id-RAB-SetupItem-RelocRegAck	INTEGER ::= 48
id-RAB-SetupList-RelocReg	INTEGER ::= 49
id-RAB-SetupList-RelocReqAck	INTEGER ::= 50
id-RAB-SetupOrModifiedItem	INTEGER ::= 51
id-RAB-SetupOrModifiedList	INTEGER ::= 52
id-RAB-SetupOrModifyItem	INTEGER ::= 53
id-RAB-SetupOrModifyList	INTEGER ::= 54
id-RAC	INTEGER ::= 55
id-RelocationType	INTEGER ::= 56
id-RequestType	INTEGER ::= 57
id-SAI	INTEGER ::= 58
id-SAPI	INTEGER ::= 59
id-SourceID	INTEGER ::= 60
id-SourceRNC-ToTargetRNC-TransparentContainer	INTEGER ::= 61
id-TargetID	INTEGER ::= 62
id-TargetRNC-ToSourceRNC-TransparentContainer	INTEGER ::= 63
id-TemporaryUE-ID	INTEGER ::= 64
id-TraceReference	INTEGER ::= 65
id-TraceType	INTEGER ::= 66
id-TransportLaverAddress	INTEGER ::= 67
id-TriggerID	INTEGER ::= 68
id-UE-ID	INTEGER ::= 69
id-UL-GTP-PDU-SequenceNumber	INTEGER ::= 70
id-RAB-FailedtoReportItem	INTEGER ::= 71
id-RAB-FailedtoReportList	INTEGER ::= 72
id-KeyStatus	INTEGER ::= 75
id-DRX-CycleLengthCoefficient	INTEGER ::= 76
id-IuSigConIdList	INTEGER ::= 77
id-IuSigConIdItem	INTEGER ::= 78

id-IuSigConId	INTEGER	::=	79
id-DirectTransferInformationItem-RANAP-RelocInf	INTEGER	::=	80
id-DirectTransferInformationList-RANAP-RelocInf	INTEGER	::=	81
id-RAB-ContextItem-RANAP-RelocInf	INTEGER	::=	82
id-RAB-ContextList-RANAP-RelocInf	INTEGER	::=	83
id-RAB-ContextFailedtoTransferItem	INTEGER	::=	84
id-RAB-ContextFailedtoTransferList	INTEGER	::=	85
id-GlobalRNC-ID	INTEGER	::=	86
id-RAB-ReleasedItem-IuRelComp	INTEGER	::=	87
id-MessageStructure	INTEGER	::=	88
id-Alt-RAB-Parameters	INTEGER	::=	89
id-Ass-RAB-Parameters	INTEGER	::=	90
id-RAB-ModifyList	INTEGER	::=	91
id-RAB-ModifyItem	INTEGER	::=	92
id-TypeOfError	INTEGER	::=	93
id-BroadcastAssistanceDataDecipheringKeys	INTEGER	::=	94
id-LocationRelatedDataRequestType	INTEGER	::=	95
id-GlobalCN-ID	INTEGER	::=	96
id-LastKnownServiceArea	INTEGER	::=	97
id-SRB-TrCH-Mapping	INTEGER	::=	98

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

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[#] 2	5.413	B C	R	529	ж re\	/ <mark>2</mark>	ж	Current ve	rsion:	5.2.0	ж
For <u>HELP</u> or	using	this form,	see bo	ttom of t	his page	or look	at the	e pop-up tex	xt over	[·] the	mbols.
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Source:	₩ <mark>R</mark> A	N WG3									
Work item code:	ж ТЕ	:1						Date:	¥ <mark>11</mark>	/11/2002	
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Summary of cha	nge: ¥	The So necessi channe One pro for the <u>Impact</u> release This CF (same pro- trelease This CF The imp without	urce RN ary infor l identifi btocol e TrCH-IE <u>assessi</u> R has is release R has an Dact car UE invo	NC to Ta rmation of ier of lur. xtension D IE . ment tow olated in becaus n impact n be cons olved sys	rget RNC of RAB Si has been vards the vards the npact tow the ASI tow the ASI sidered is sidered is	transp ubflow addeo previou ards th N.1 has nctiona olated tion.	arent and S d for t <u>us ver</u> he pre s char il and becau	container is SRBs mappi he RAB-Tr(sion of the vious version nged. protocol po use it only a	s corre ing oni CH-Ma <u>specifi</u> on of th int of v	ected to ind to the tran apping IE a <u>ication (sa</u> ne specific view. the reloca	clude the sport and also <u>me</u> ation

Consequences if not approved:	# The relocation with UE not involved does not work.
Clauses affected:	8.6.2 , 9.2.1.28, 9.3.4, 9.3.6
	YN
Other specs	X Other core specifications XTS 25.413 R99CR 527 TS 25.413 REL-4CR 528
affected:	X Test specifications X O&M Specifications
Other comments:	X

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

8.6.2 Successful Operation



Figure 5: Relocation Preparation procedure. Successful operation.

The source RNC shall initiate the procedure by generating RELOCATION REQUIRED message. The source RNC shall decide whether to initiate the intra-system Relocation or the 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 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".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of UE. The source RNC shall set the *Relocation Type* IE accordingly 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 signalling connections existing for the UE by setting correctly the *Number of Iu Instances* IE.

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 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 security mode control procedure has been successfully performed and the associated *Chosen Encryption Algorithm* IE that has been selected for this domain.

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 <u>Source RNC-to-Target RNC transparent container IE</u> container 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) or USCH(s), the Source RNC to Target RNC Transparent Container IE shall:

- <u>-for each RAB include the RAB ID, the CN Domain Indicator IE and include</u> the mapping between each RAB subflow and transport channel identifier(s) <u>over Iur</u>, 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) or USCH(s), the DSCH ID(s) or USCH ID(s) 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 *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.

The source RNC shall send the RELOCATION REQUIRED message to the CN and the source RNC 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 RELOCATION COMMAND message to the source RNC and the CN shall start the timer $T_{\text{RELOCcomplete}}$.

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

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

Interactions with other procedures:

If, after RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating an other 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 Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of Relocation Cancel procedure, the source RNC shall continue the initiated RANAP procedure;

2. terminate the initiated RANAP procedure without any changes in UTRAN by sending 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.

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 the case the relocation is cancelled the RNC shall resume any suspended procedures (if any).

After Relocation Preparation procedure is terminated successfully, 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 lu-mode

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].

9.2.1.28 Source RNC to Target RNC Transparent Container

Source RNC to Target RNC Transparent Container IE is an information element that is produced by source RNC and is transmitted to target RNC. In inter-system handover the IE is transmitted from external relocation source to target RNC.

This IE is transparent to CN.

	IE/Group Name	Prese nce	Range	IE type and reference	Semantics description	<u>Criticality</u>	<u>Assigned</u> <u>Criticality</u>
l	RRC Container	М				=	
l	Number of lu Instances	М		INTEGER (12)		=	
I	Relocation Type	М		9.2.1.23		-	
İ	Chosen Integrity Protection Algorithm	0		9.2.1.13	Indicates the integrity protection algorithm.		
l	Integrity Protection Key	0		Bit String		Ξ	
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of signalling data.	Ξ	
l	Ciphering Key	0		Bit String (128)		Ξ	
l	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of CS user data.	=	
	Chosen Encryption Algorithm	0		9.2.1.14	Indicates the algorithm for ciphering of PS user data.	Ξ	
l	d-RNTI	C - ifUEno tinvolv ed		INTEGER (010485 75)		Ξ	
	Target Cell ID	C - ifUEinv olved		INTEGER (026843 5455)	This information element identifies a cell uniquely within UTRAN and consists of RNC-ID (12 bits) and C-ID (16 bits) as defined in TS 25.401 [3].	<u> </u>	
	Downlink Cell Load Information	0		Cell Load Informatio n 9.2.1.49	For the Downlink	=	
	Uplink Cell Load Information	0		Cell Load Informatio n 9.2.1.49	For the Uplink	=	
	RAB TrCH Mapping	0	1 to <maxnoo fRABs></maxnoo 			=	
I	>RAB ID	М		9.2.1.2		=	
	>RAB Subflow	M	1 to <maxra B- Subflows ></maxra 		The RAB Subflows shall be presented in an order that corresponds to the order in which the RBs are presented per RAB in the RRC container included in this IE.	=	
	>> Transport Channel IDs					Ξ	
	>>> DCH ID	0		INTEGER (0255)	The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	Ξ.	
	>>> DSCH ID	0		INTEGER (0255)	The DSCH ID is the identifier of an active downlink shared transport channel. It is unique for each DSCH among the active DSCHs simultaneously	Ξ	

I

					allocated for the same UE.		
	>>> USCH ID	0		INTEGER (0255)	The USCH ID is the identifier of an active uplink shared transport channel. It is unique for each USCH among the active USCHs simultaneously allocated for the same UE.	Ξ	
	<u>>CN Domain</u> Indicator	<u>M</u>		<u>9.2.1.5</u>		<u>YES</u>	<u>Ignore</u>
Ī	<u>SRB TrCH</u> Mapping	<u>0</u>	<u>1 to</u> <u><maxnoo< u=""> <u>fSRBs></u></maxnoo<></u>			<u>GLOBAL</u>	<u>Reject</u>
I	<u>>SRB ID</u>	M		<u>INTEGER</u> (132)	The SRB ID is the absolute value of the SRB.	Ξ	
	<u>>DCH ID</u>	<u>O</u>		<u>INTEGER</u> (0255)	The DCH ID is the identifier of an active dedicated transport channel over lur. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.	=	
	<u>>DSCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The DSCH ID is the identifier of an active downlink shared transport channel over lur. It is unique for each DSCH among the active DSCHs simultaneously allocated for the same UE.	Ξ	
	<u>>USCH ID</u>	<u>0</u>		<u>INTEGER</u> (0255)	The USCH ID is the identifier of an active uplink shared transport channel over lur. It is unique for each USCH among the active USCHs simultaneously allocated for the same UE.	1	

Condition	Explanation
IfUEnotinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE not involved in relocation of SRNS".
IfUEinvolved	This IE shall be present if the <i>Relocation type</i> IE is set to "UE involved in relocation of SRNS".

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.
maxRABSubflows	Maximum no. of subflows per RAB. Value is 7.
maxnoofSRBs	Maximum no. of SRBs per RAB. Value is 8.

9.3.4	Information Element Definitions
*******	*************************
Informat	ion Element Definitions
*******	**********
RANAP-IEs { itu-t (0) id umts-Access	<pre>dentified-organization (4) etsi (0) mobileDomain (0) (20) modules (3) ranap (0) version1 (1) ranap-IEs (2) }</pre>
DEFINITIONS	AUTOMATIC TAGS ::=
BEGIN	
IMPORTS maxNrOf maxNrOf maxNrOf maxNrOf maxNrOf maxRAB- maxNrOf maxNrOf maxNrOf maxNrOf maxNrOf maxNrOf	Errors, PDPDirections, Points, RABs, SRBs, SeparateTrafficDirections, Subflows, SubflowCombination, Levels, AltValues, SNAs, LAs, PLMNsSN, omainIndicator,
id-SRB-' id-Type	ageStructure, TrCH-Mapping, OfError,
id-Down id-Uplin FROM RANAP-0	linkCellLoadInformation, nkCellLoadInformation Constants
Unchanged to	ext is removed
RAB-Subflow	CombinationBitRate ::= INTEGER (016000000)
RAB-TrCH-Maj RAB-TrC	pping ::= SEQUENCE (SIZE (1maxNrOfRABs)) OF H-MappingItem
RAB-TrCH-Ma rAB-ID trCH-ID iE-Exter	<pre>ppingItem ::= SEQUENCE {</pre>

```
}
RAB-TrCH-MappingItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 99 to enable transfer of RAB Subflow mapping onto Iur transport channel Ids for a given indicated domain --
                                                            EXTENSION CN-DomainIndicator
                                                                                            PRESENCE optional },
       ID id-CN-DomainIndicator
                                    CRITICALITY ignore
    . . .
Unchanged text is removed
SourceRNC-ID ::= SEQUENCE {
    pLMNidentity
                                PLMNidentity,
    rNC-ID
                        RNC-ID,
    iE-Extensions
                            ProtocolExtensionContainer { {SourceRNC-ID-ExtIEs} } OPTIONAL
SourceRNC-ID-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    . . .
SourceRNC-ToTargetRNC-TransparentContainer ::= SEQUENCE {
    rRC-Container
                            RRC-Container.
    numberOfIuInstances
                            NumberOfIuInstances,
    relocationType
                            RelocationType,
    chosenIntegrityProtectionAlgorithm ChosenIntegrityProtectionAlgorithm OPTIONAL,
    integrityProtectionKey
                                IntegrityProtectionKey
                                                                OPTIONAL,
    chosenEncryptionAlgorithForSignalling ChosenEncryptionAlgorithm
                                                                        OPTIONAL,
                            EncryptionKey
    cipheringKey
                                                        OPTIONAL,
    chosenEncryptionAlgorithForCS ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
    chosenEncryptionAlgorithForPS
                                    ChosenEncryptionAlgorithm
                                                                    OPTIONAL,
                        D-RNTI
                                                OPTIONAL
    d-RNTI
    -- This IE shall be present if the Relocation type IE is set to "UE not involved in relocation of SRNS" --,
                            TargetCellId
                                                        OPTIONAL
    targetCellId
    -- This IE shall be present if the Relocation type IE is set to "UE involved in relocation of SRNS" --,
    rAB-TrCH-Mapping
                                RAB-TrCH-Mapping
                                                                OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { {SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs } } OPTIONAL,
    . . .
SourceRNC-ToTargetRNC-TransparentContainer-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 99 to enable transfer of SRB mapping onto Iur transport channel Ids --
       ID id-SRB-TrCH-Mapping CRITICALITY reject
                                                        EXTENSION SRB-TrCH-Mapping PRESENCE optional }
-- Extension for Release 5 to enable Inter RAN Load Information Exchange over Iu --
    {ID id-DownlinkCellLoadInformation CRITICALITY ignore
                                                                EXTENSION CellLoadInformation
                                                                                                  PRESENCE optional }
-- Extension for Release 5 to enable Inter RAN Load Information Exchange over Iu --
    {ID id-UplinkCellLoadInformation CRITICALITY ignore
                                                                EXTENSION CellLoadInformation
                                                                                                  PRESENCE optional },
    . . .
SourceStatisticsDescriptor ::= ENUMERATED {
    speech,
    unknown,
```

}
SRB-ID ::= INTEGER (132)
SRB-TrCH-Mapping ::= SEQUENCE (SIZE (1maxNrOfSRBs)) OF SRB-TrCH-MappingItem
SRB-TrCH-MappingItem ::= SEQUENCE {
sRB-ID SRB-ID,
iE-Extensions ProtocolExtensionContainer { { SRB-TrCH-MappingItem-ExtIEs} } OPTIONAL,
$\frac{\dots}{1}$
SRB-TrCH-MappingItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
SubflowSDU-Size ::= INTEGER (04095)

-- Unit is bit

::= INTEGER (0..4095)

Unchanged text is removed

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

TrCH-ID ::= SEQUENCE {

dCH-ID	DCH-ID	OPTIONAL,	
dSCH-ID	DSCH-ID	OPTIONAL,	
uSCH-ID	USCH-ID	OPTIONAL,	
iE-Extensions	Protoc	colExtensionContainer { { TrCH-ID-ExtIEs} } OPTIONAI	Ξ,

TrCH-ID-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {

. . .

}

. . .

- TrCH-ID-List ::= SEQUENCE (SIZE (1..maxRAB-Subflows)) OF TrCH-ID
- TriggerID ::= OCTET STRING (SIZE (3..22))

9.3.6	Constant Definition	ons			
*******	*****	* * * * * * * * * *	***	* * * * * * * * * * * * * * * * * *	
Constant	definitions				
*******	****	******	***	* * * * * * * * * * * * * * * * * * * *	
DANAD_Congt	anta (
itu-t (0) i umts-Access	dentified-organization (20) modules (3) ranap	(4) etsi ((0) versi	0) 1 .on1	mobileDomain (0) (1) ranap-Constants (4)	}
DEFINITIONS	AUTOMATIC TAGS ::=				
BEGIN					
******	****	* * * * * * * * * *	***	* * * * * * * * * * * * * * * * *	
Elementa	ry Procedures				
*******	*****	* * * * * * * * * * *	* * *	* * * * * * * * * * * * * * * * * * * *	
id-RAB-Assi	gnment	INTEGER	::=	0	
id-Iu-Relea	se	INTEGER	::=	1	
id-Relocati	onPreparation	INTEGER	::=	2	
id-Relocati	onResourceAllocation	INTEGER	::=	3	
id-Relocati	onCancel	INTEGER	::=	4	
id-SRNS-Con	textTransfer	INTEGER	::=	5	
id-Security	ModeControl	INTEGER	::=	6	
id-DataVolu	ImeReport	INTEGER	::=	7	
id DAD Dolo	agaDaguagt	INIEGER	=	9	
id-Tu-Poloo	aserequest	INTEGER		10	
id-Relocati	onDetect	INTEGER		12	
id-Relocati	onComplete	INTEGER	::=	13	
id-Paging	oncomprete	INTEGER	::=	14	
id-CommonID)	INTEGER	::=	15	
id-CN-Invok	eTrace	INTEGER	::=	16	
id-Location	ReportingControl	INTEGER	::=	17	
id-Location	Report	INTEGER	::=	18	
id-InitialU	IE-Message	INTEGER	::=	19	
id-DirectTr	ansfer	INTEGER	::=	20	
id-Overload	Control	INTEGER	::=	21	
id-ErrorInd	lication	INTEGER	::=	22	
id-SRNS-Dat	aForward	INTEGER	::=	23	
id-ForwardS	RNS-Context	INTEGER	::=	24	
id-privateM	lessage	INTEGER	::=	25	
id_BogotBog		TNTEGER	· · =	20 27	
id_PANAD_PC	location	TNTEGER	· · =	∠ / 28	
id_RARAMAP-RE	fyRemiest	TNTEGER	=	20	
id-Location	RelatedData	TNTEGER	::=	30	
id-Informat	ionTransfer	INTEGER	::=	31	

--

-- Extension constants

maxPrivateIEs	INTEGER	: :=	65535
maxProtocolExtensions	INTEGER	::=	65535
maxProtocolIEs	INTEGER	::=	65535

- --
- -- Lists --

maxNrOfDTs maxNrOfErrors maxNrOfIuSigConIds maxNrOfPDPDirections maxNrOfPoints	INTEGER INTEGER INTEGER INTEGER INTEGER	::= ::= ::= ::=	15 256 250 2 15
maxNrOfRABs	INTEGER	::=	256
maxNrOfSeparateTrafficDirections	INTEGER	::=	2
maxNrOfSRBs	INTEGER	::=	8
maxNrOfVol	INTEGER	::=	2
maxNrOfLevels	INTEGER	::=	256
maxNrOfAltValues	INTEGER	::=	16
maxNrOiPLMNsSN	INTEGER	::=	32
maxNrOiLAs	INTEGER	::=	65536
maxNrOiSNAs	INTEGER	::=	65536
maxRAB-Subflows	INTEGER	::=	7
maxRAB-SubflowCombination	INTEGER	::=	64
 IEs ********************************	*****	* * * * *	* * * * * * * * * * * * * * * * * * * *
 IEs ********************************	* * * * * * * * *	****	**************************************
 IEs *******************************	*****	****	**************************************
 IEs *******************************	******	* * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4
 IEs *******************************	*****	***	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5
 IEs *******************************	**************************************	* * * * :	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6
 IEs *******************************	:********* :hm	* * * * :	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7
 IEs *******************************	********** :hm	* * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8
 IEs *******************************	********** :hm	* * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9
 IEs *******************************	********** :hm	* * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9 INTEGER ::= 10
 IEs *******************************	:*********	****	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9 INTEGER ::= 10 INTEGER ::= 11
 IEs *******************************	:********* :hm	****	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9 INTEGER ::= 10 INTEGER ::= 11 INTEGER ::= 12
 IEs *******************************	:*********	* * * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9 INTEGER ::= 9 INTEGER ::= 10 INTEGER ::= 11 INTEGER ::= 12 INTEGER ::= 13
 IEs *******************************	:*********	* * * * *	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 8 INTEGER ::= 9 INTEGER ::= 10 INTEGER ::= 11 INTEGER ::= 12 INTEGER ::= 13 INTEGER ::= 14
 IEs *******************************	:********	****	INTEGER ::= 0 INTEGER ::= 3 INTEGER ::= 4 INTEGER ::= 5 INTEGER ::= 6 INTEGER ::= 7 INTEGER ::= 7 INTEGER ::= 9 INTEGER ::= 10 INTEGER ::= 10 INTEGER ::= 12 INTEGER ::= 13 INTEGER ::= 14 INTEGER ::= 15

id-NonSearchingIndication	INTEGER ::= 17
id-NumberOfSteps	INTEGER ::= 18
id-OMC-ID	INTEGER ::= 19
id-OldBSS-ToNewBSS-Information	INTEGER ::= 20
id-PagingAreaID	INTEGER ::= 21
id-PagingCause	INTEGER ::= 22
id-PermanentNAS-UE-ID	INTEGER ::= 23
id-RAB-ContextItem	INTEGER ::= 24
id-RAB-ContextList	INTEGER ::= 25
id-RAB-DataForwardingItem	INTEGER ::= 26
id-RAB-DataForwardingItem-SRNS-CtxReq	INTEGER ::= 27
id-RAB-DataForwardingList	INTEGER ::= 28
id-RAB-DataForwardingList-SRNS-CtxReq	INTEGER ::= 29
id-RAB-DataVolumeReportItem	INTEGER ::= 30
id-RAB-DataVolumeReportList	INTEGER ::= 31
id-RAB-DataVolumeReportRequestItem	INTEGER ::= 32
id-RAB-DataVolumeReportRequestList	INTEGER ::= 33
id-RAB-FailedItem	INTEGER ::= 34
id-RAB-FailedList	INTEGER ::= 35
id-RAB-ID	INTEGER ::= 36
id-RAB-QueuedItem	INTEGER ::= 37
id-RAB-QueuedList	INTEGER ::= 38
id-RAB-ReleaseFailedList	INTEGER ::= 39
id-RAB-ReleaseItem	INTEGER ::= 40
id-RAB-ReleaseList	INTEGER ::= 41
id-RAB-ReleasedItem	INTEGER ::= 42
1d-RAB-ReleasedList	INTEGER ::= 43
id-RAB-ReleasedList-IuRelComp	INTEGER ::= 44
id-RAB-RelocationReleaseItem	INTEGER ::= 45
id-RAB-RelocationReleaseList	INTEGER ::= 46
1d-RAB-SetupItem-Relockeq	INTEGER := 47
id-RAB-SetupItem-RelocReqAck	INTEGER ::= 48
1d-RAB-SetupList-Relocked	INTEGER := 49
	INTEGER ::= 50
id-RAB-SetupOrModifiedItem	INTEGER ::= 51
1d-RAB-SetupOrModifiedList	INTEGER := 52
1d-RAB-SetupOrModifyItem	INTEGER ::= 53
id-RAB-SetupOrModilyList	INTEGER ::= 54
	INTEGER ::= 55
1d-RelocationType	INTEGER ::= 56
la-RequestType	INTEGER ::= 57
IU-SAL	INIEGER ··= 58
IQ-SAPI	INTEGER ··= 59
id SourceID	INTEGER ::= 60
id Heuret D	INTEGER ··= 61
id TargetID	INTEGER ::= 62
Id-IargetRNC-IoSourceRNC-IransparentContainer	INTEGER ··= 63
id TrageDeference	INIEGER ··= 64
id TraceRelefence	INTEGER ··= 65
id Transport averiddrogg	INTEGER ··= 00
id-TriggorID	INTEGER ··= 0/
IG-ILIAGELID	INTEGER ··- CO
id-III-CTD-DDII-SoguengeNumber	INTEGER ··- 70
id-PAP-FailedtePopertItem	INTEGER $\cdot \cdot = 70$
id_PAR_FailedtoReportLigt	INTEGER ··- 70
IN-NED-LAITENCOKEDOICHISC	THIEGER ··= /Z

id-KeyStatus	INTEGER	::=	75
id-DRX-CycleLengthCoefficient	INTEGER	::=	76
id-IuSigConIdList	INTEGER	::=	77
id-IuSigConIdItem	INTEGER	::=	78
id-IuSigConId	INTEGER	::=	79
id-DirectTransferInformationItem-RANAP-RelocInf	INTEGER	::=	80
id-DirectTransferInformationList-RANAP-RelocInf	INTEGER	::=	81
id-RAB-ContextItem-RANAP-RelocInf	INTEGER	::=	82
id-RAB-ContextList-RANAP-RelocInf	INTEGER	::=	83
id-RAB-ContextFailedtoTransferItem	INTEGER	::=	84
id-RAB-ContextFailedtoTransferList	INTEGER	::=	85
id-GlobalRNC-ID	INTEGER	::=	86
id-RAB-ReleasedItem-IuRelComp	INTEGER	::=	87
id-MessageStructure	INTEGER	::=	88
id-Alt-RAB-Parameters	INTEGER	::=	89
id-Ass-RAB-Parameters	INTEGER	::=	90
id-RAB-ModifyList	INTEGER	::=	91
id-RAB-ModifyItem	INTEGER	::=	92
id-TypeOfError	INTEGER	::=	93
id-BroadcastAssistanceDataDecipheringKeys	INTEGER	::=	94
id-LocationRelatedDataRequestType	INTEGER	::=	95
id-GlobalCN-ID	INTEGER	::=	96
id-LastKnownServiceArea	INTEGER	::=	97
id-SRB-TrCH-Mapping	INTEGER	$ \hat{\cdot} \hat{\cdot} =$	98
id-InterSystemInformation-TransparentContainer	INTEGER	::=	9 <mark>8</mark> 9
id-NewBSS-To-OldBSS-Information	INTEGER	::=	<u>10099</u>
id-DownlinkCellLoadInformation	INTEGER	::=	10 <mark>1</mark> 0
id-UplinkCellLoadInformation	INTEGER	::=	10 <mark>2</mark> 1
id-SourceRNC-PDCP-context-info	INTEGER	::=	10 <mark>3</mark> 2
id-InformationTransferID	INTEGER	::=	10 <mark>4</mark> 3
id-SNA-Access-Information	INTEGER	::=	10 <u>5</u> 4
id-ProvidedData	INTEGER	::=	10 <mark>6</mark> 5
id-GERAN-BSC-Container	INTEGER	::=	10 <mark>76</mark>
id-GERAN-Classmark	INTEGER	::=	10 <mark>8</mark> 7
id-GERAN-Iumode-RAB-Failed-RABAssgntResponse-Ite	em INTH	EGER	::= 10 <mark>98</mark>
id-GERAN-Iumode-RAB-FailedList-RABAssgntResponse	e INTE	EGER	::= 1 <u>10</u> 09
$id\-Location \\ Related \\ Data \\ Request \\ Type \\ Specific \\ To \\ GERAMETERM \\ To \\ Specific \\ To \\ To \\ To \\ Specific \\ To \\ To \\ To \\ To \\ To \\ To \\ To \\ T$	IIuMode	INTI	EGER ::= 11 <u>1</u> 0

END

Rel-6

(Release 6)

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

Tdoc #R3-022541

										CR-Form-v7	
ж	2	<mark>5.413</mark>	CR	530	жrev	/ 1	ж (Current vers	ion: <mark>3</mark> .	.11.1	ж
For <u>HELP</u> on Proposed change	usinų e affe	g this for	rm, see JICC ap	bottom of th	is page (ME[or look a	at the j dio Acc	pop-up text	over the	e ೫ syn Core Ne	nbols. :twork X
Title:	¥ <mark>C</mark>	orrectio	n of cod	ing of GSM	IEs						
Source:	ж <mark>R</mark>	<mark>AN WG</mark>	3								
Work item code:	ж Т	EI						<i>Date:</i> ೫	11/11	/2002	
Category:	₩ <mark>F</mark> Us De be	e <u>one</u> of F (con A (cor B (add C (fun D (edi tailed exp found in	the follow rection) responds dition of f ctional m torial mo blanation 3GPP T	wing categorie s to a correcti eature), nodification of dification) us of the abov <u>R 21.900</u> .	es: ion in an (f feature) re categol	earlier re ries can	lease)	Release: # Use <u>one</u> of 2 R96 R97 R98 R99 Rel-4 Rel-5	R99 the follo (GSM F (Releas (Releas (Releas (Releas (Releas (Releas	wing rele Phase 2) se 1996) se 1997) se 1998) se 1999) se 4) se 5)	eases:

Reason for change: ℜ	 Coding of the IE from GSM 0808 is ambiguous. There can be two different interpretations: TLV or V. Invalid reference made to 24008 to encode the Classmark2 and Classmark3 information elements.
Summary of change, #	The coding of IE coming from the CSM specifications in defined
Summary of change. m	The county of the conting from the GSW specifications in defined.
	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 and protocol point of view.
	The impact can be considered isolated because it only affects the relocation system function.
0	Inter working between two wooders having different interpretations of how to
not approved:	encode the IEs is not possible.

Clauses affected:	ж	9.1.9	<mark>, 9.1.12, 9.1.26, 9.1.27, 9.1.29,</mark> 9	9.1	.31
		Y N			
Other specs	ж	X	Other core specifications	€	TS 25.413 REL-4 CR 531 TS 25.413 REL-5 CR 532
affected:		X X	Test specifications O&M Specifications		10 20.413 KEE-0 OK 002
Other comments:	ж				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

9.1.9 RELOCATION REQUIRED

This message is sent by the source RNC to inform the CN that a relocation is to be performed.

Direction: RNC \rightarrow CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and	Semantics	Criticality	Assigned
			Telefelice	description		Criticality
Message Type	M		9.2.1.1		YES	reject
Relocation Type	М		9.2.1.23		YES	reject
Cause	M		9.2.1.4		YES	ignore
Source ID	М		9.2.1.24		YES	ignore
Target ID	M		9.2.1.25		YES	reject
MS Classmark 2	C – ifGSMtarget		9.2.1.26	As d <mark>Đ</mark> efined in [<u>10</u> 8].	YES	reject
MS Classmark 3	C – ifGSMtarget		9.2.1.27	As d <mark>Đ</mark> efined in [<u>10</u> 8].	YES	ignore
Source RNC To Target	C –		9.2.1.28		YES	reject
RNC Transparent	ifUMTStarget					_
Container						
Old BSS To New BSS			9.2.1.29	Coded as	YES	ignore
Information	0			the Old BSS		
				to New BSS		
				information		
				<u>elements</u>		
				field of the		
				Old BSS to		
				<u>New BSS</u>		
				Information		
				<u>IE defined in</u>		
				[11]. Can		
				optionally be		
				used if GSM		
				target but		
				not used for		
				UMTS		
				target.		

Condition	Explanation
ifGSMtarget	This IE shall be present if the <i>Target ID</i> IE contains a CG/IE.
ifUMTStarget	This IE shall be present if the <i>Target ID</i> IE contains a <i>Target RNC-ID</i> IE.

9.1.12 RELOCATION COMMAND

This message is sent by the CN to source RNC to inform that resources for the relocation are allocated in target RNC.

Direction: $CN \rightarrow RNC$.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and	Semantics	Criticality	Assigned
	N 4		reference	description	VEO	Criticality
Message Type	М		9.2.1.1		YES	reject
Target RNC To Source RNC	0		9.2.1.30		YES	reject
Transparent Container						-
L3 Information	0		9.2.1.31	<u>Coded as</u> <u>the value</u> <u>part of the</u> <u>Layer 3</u> <u>Information</u> <u>IE</u> <u>D</u> defined in [11] (i.e. <u>excluding</u> <u>the Element</u> <u>Identifier and</u> <u>the Length</u> fields).	YES	ignore
RABs To Be Released List	0				YES	ignore
>RABs To Be Released Item IEs		1 to <maxnoofrabs></maxnoofrabs>			EACH	ignore
>>RAB ID	М		9.2.1.2		-	
RABs Subject To Data Forwarding List	0				YES	ignore
>RABs Subject To Data Forwarding Item IEs		1 to <maxnoofrabs></maxnoofrabs>			EACH	ignore
>>RAB ID	Μ		9.2.1.2		-	
>>Transport Layer Address	М		9.2.2.1		-	
>>Iu Transport Association	М		9.2.2.2		-	
Criticality Diagnostics	0		9.2.1.35		YES	ignore

Range bound	Explanation		
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.		

9.2.1.26 MS Classmark 2

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 2	М		OCTET STRING	Contents defined in [<u>10</u> 8]

9.2.1.27 MS Classmark 3

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 3	М		OCTET STRING	Contents defined in [108]

9.2.1.29 Old BSS to New BSS Information

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Old BSS To New BSS Information	М		OCTET STRING	Coded as the Old BSS to New BSS information elements field of the Old BSS to New BSS Information IE defined Contents defined in [11].

9.2.1.31 L3 Information

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
L3 Information	Μ		OCTET STRING	<u>Coded as the value part of the</u> <u>Layer 3 Information IE</u> <u>Contents defined in [11] (i.e.</u> <u>excluding the Element</u> <u>Identifier and the Length</u> fields).

Rel-6

(Release 6)

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

Tdoc #R3-022542

										CR-Form-v7	
ж		<mark>25.413</mark>	CR	531	ж rev	1	ж	Current vers	ion: 🖌	1.6.0	ж
For <u>HELP</u> or	า us	ing this fo	rm, see b	ottom of thi	s page o	r look	at the	pop-up text	over th	е Ж syn	nbols.
Proposed change affects: UICC apps # ME Radio Access Network X Core Network X											
Title:	Ж	Correction	n of codir	ng of GSM I	Es						
Source:	Ж	RAN WG	3								
Work item code:	ж	TEI						Date: ೫	11/11	1/2002	
Category:	¥	A Use <u>one</u> of F (cor A (cor B (add C (fun D (edi Detailed ex be found in	the follow, rection) responds dition of fe ctional mod torial mod blanations 3GPP TR	ing categorie to a correctio ature), odification of ification) of the above 21,900.	es: on in an ea feature) e categoria	arlier re es can	elease	Release: ₩ Use <u>one</u> of 2 (R96 R97 R98 R99 Rel-4 Rel-5	Rel-4 the follo (GSM F (Releas (Releas (Releas (Releas (Releas (Releas	wing rele Phase 2) Se 1996) Se 1997) Se 1998) Se 1999) Se 4) Se 5)	eases:

Reason for change: ₩	 Coding of the IE from GSM 0808 is ambiguous. There can be two different interpretations: TLV or V. Invalid reference made to 24008 to encode the Classmark2 and Classmark3 information elements.
Summary of change: #	The coding of IE coming from the GSM specifications in defined.
	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 and protocol point of view.
	The impact can be considered isolated because it only affects the relocation system function.
Consequences if % not approved:	Interworking between two vendors having different interpretations of how to encode the IEs is not possible.

Clauses affected:	% 9.1.9, 9.1.12, 9.1.26, 9.1.27, 9.1.29, 9.1.31						
	[YN					
Other specs	ж	x	Other core specifications #	C T	FS 25.413 R99 CR 530		
affected:		X X	Test specifications O&M Specifications		10 25.410 NEE 0 01 002		
Other comments:	Ħ						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

9.1.9 RELOCATION REQUIRED

This message is sent by the source RNC to inform the CN that a relocation is to be performed.

Direction: RNC \rightarrow CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and	Semantics	Criticality	Assigned
			reference	description		Criticality
Message Type	М		9.2.1.1		YES	reject
Relocation Type	М		9.2.1.23		YES	reject
Cause	М		9.2.1.4		YES	ignore
Source ID	М		9.2.1.24		YES	ignore
Target ID	М		9.2.1.25		YES	reject
MS Classmark 2	C – ifGSMtarget		9.2.1.26	As Defined in [108].	YES	reject
MS Classmark 3	C – ifGSMtarget		9.2.1.27	As Defined in [<u>10</u> 8].	YES	ignore
Source RNC To Target RNC Transparent Container	C – ifUMTStarget		9.2.1.28		YES	reject
Old BSS To New BSS Information	0		9.2.1.29	Coded as the Old BSS to New BSS information elements field of the Old BSS to New BSS Information IE defined Defined in [11]. Can optionally be used if GSM target but not used for UMTS target.	YES	ignore

Condition	Explanation
ifGSMtarget	This IE shall be present if the <i>Target ID</i> IE contains a CGI IE.
ifUMTStarget	This IE shall be presentif the <i>Target ID</i> IE contains a <i>Target RNC-ID</i> IE.

9.1.12 RELOCATION COMMAND

This message is sent by the CN to source RNC to inform that resources for the relocation are allocated in target RNC.

Direction: $CN \rightarrow RNC$.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and	Semantics	Criticality	Assigned
			reference	description		Criticality
Message Type	М		9.2.1.1		YES	reject
Target RNC To Source RNC	0		9.2.1.30		YES	reject
Transparent Container						,
L3 Information	0		9.2.1.31	<u>Coded as</u> <u>the value</u> <u>part of the</u> <u>Layer 3</u> <u>Information</u> <u>IE Defined</u> <u>defined in</u> [11] (i.e. <u>excluding</u> <u>the Element</u> <u>Identifier and</u> <u>the Length</u> fields).	YES	ignore
RABs To Be Released List	0				YES	ignore
>RABs To Be Released		1 to			EACH	ignore
Item IEs		<maxnoofrabs></maxnoofrabs>				Ū.
>>RAB ID	М		9.2.1.2		-	
RABs Subject To Data Forwarding List	0				YES	ignore
>RABs Subject To Data		1 to			EACH	ignore
Forwarding Item IEs		<maxnoofrabs></maxnoofrabs>				U U
>>RAB ID	М		9.2.1.2		-	
>>Transport Layer Address	М		9.2.2.1		-	
>>lu Transport Association	М		9.2.2.2		-	
Criticality Diagnostics	0		9.2.1.35		YES	ignore

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.

9.2.1.26 MS Classmark 2

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description	
MS Classmark 2	М		OCTET STRING	Contents defined in [108]	

9.2.1.27 MS Classmark 3

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 3	М		OCTET STRING	Contents defined in [108]

9.2.1.29 Old BSS to New BSS Information

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Old BSS To New BSS Information	Μ		OCTET STRING	Coded as the Old BSS to New BSS information elements field of the Old BSS to New BSS Information IE defined Contents defined in [11].

9.2.1.31 L3 Information

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
L3 Information	Μ		OCTET STRING	Coded as the value part of the Layer 3 Information IE defined Contents defined in [11] (i.e. excluding the Element Identifier and the Length fields.

<u>Rel-</u>6

(Release 6)

3GPP TSG-RAN3 Meeting #33 Sophia, France, 11th-15th November 2002

Tdoc #R3-022543

										CR-Form-v7		
ж		<mark>25.41</mark> 3	CR	532	жrе	ev	1	ж	Current ver	sion:	5.2.0	ж
For <u>HELP</u> 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:	Title: # Correction of coding of GSM IEs											
Source:	ж	RAN WO	33									
Work item code:	Ж	TEI							Date: ዝ	6 <mark>11</mark> ,	/11/2002	
Category:	₩	A Use <u>one</u> of F (co A (co B (ad C (fut D (co Detailed ex be found ir	f the follo rrection) prespond Idition of nctional n kplanatio 3GPP 1	owing categorie ds to a correction feature), modification of odification) ons of the above <u>FR 21.900</u> .	es: on in a feature e categ	n ear e) gories	lier re s can	eleas	Release: # Use <u>one</u> o 2 e) R96 R97 R98 R99 Rel-4 Rel-5	f the fo (GSI (Rela (Rela (Rela (Rela (Rela (Rela	II-5 DIIowing re M Phase 2 ease 1996 ease 1997 ease 1998 ease 1999 ease 4) ease 5)	leases:)))))

Reason for change: ೫	 Coding of the IE from GSM 0808 is ambiguous. There can be two different interpretations: TLV or V. Invalid reference made to 24008 to encode the Classmark2 and Classmark3 information elements.
Summary of change: #	The coding of IE coming from the GSM specifications in defined.
	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 and protocol point of view.
	The impact can be considered isolated because it only affects the relocation system function.
0	Interventing between two venders beving different interpretations of bevints
not approved:	encode the IEs is not possible.

Clauses affected:	# 9.1.9, 9.1.12, 9.1.26, 9.1.27, 9.1.29, 9.1.31							
	`	YN						
Other specs	ж	X	Other core specifications #	TS 25.413 R99 CR 530				
affected:		X X	Test specifications O&M Specifications	15 25.413 REL-4 CR 531				
Other comments:	ж							

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <u>http://www.3gpp.org/specs/CR.htm</u>. 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

9.1.9 RELOCATION REQUIRED

This message is sent by the source RNC to inform the CN that a relocation is to be performed.

Direction: RNC \rightarrow CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.1		YES	reject
Relocation Type	M		9.2.1.23		YES	reject
Cause	М		9.2.1.4		YES	ignore
Source ID	M		92124		YES	ignore
Target ID	M		9.2.1.25		YES	reject
MS Classmark 2	C – ifGSMtarget		9.2.1.26	<u>As Dd</u> efined in [<u>108</u>].	YES	reject
MS Classmark 3	C – ifGSMtarget		9.2.1.27	As <u>Dd</u> efined in [<u>10</u> 8].	YES	ignore
Source RNC To Target RNC Transparent Container	C – ifUMTStarget		9.2.1.28		YES	reject
Old BSS To New BSS Information	0		9.2.1.29	Coded as the Old BSS to New BSS information elements field of the Old BSS to New BSS Information IE_Defined defined in [11]. Can optionally be used if GSM target but not used for UMTS target.	YES	ignore
GERAN Classmark	0		9.2.1.57	Ŭ Ŭ	YES	ignore

Condition	Explanation				
ifGSMtarget	This IE shall be present if the <i>Target ID</i> IE contains a CGI IE.				
ifUMTStarget	This IE shall be presentif the <i>Target ID</i> IE contains a <i>Target RNC-ID</i> IE.				

9.1.12 RELOCATION COMMAND

This message is sent by the CN to source RNC to inform that resources for the relocation are allocated in target RNC.

Direction: $CN \rightarrow RNC$.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and	Semantics	Criticality	Assigned
Magaga Tura	N.4			description	VES	Criticality
Message Type	IVI		9.2.1.1		TES	reject
Target RNC To Source RNC	0		9.2.1.30		YES	reject
Transparent Container						,
Inter-System Information	0		9.2.1.48		YES	ignore
Transparent Container						U
L3 Information	0		9.2.1.31	Coded as	YES	ignore
				the value		Ũ
				part of the		
				Layer 3		
				Information		
				IE Defined		
				defined in		
				[11] <u>(i.e.</u>		
				excluding		
				the Element		
				Identifier and		
				the Length		
				<u>fields)</u> .		
RABs To Be Released List	0				YES	ignore
>RABs To Be Released		1 to			EACH	ignore
Item IEs		<maxnoofrabs></maxnoofrabs>				
>>RAB ID	М		9.2.1.2		-	
RABs Subject To Data	0				YES	ignore
Forwarding List						
>RABs Subject To Data		1 to			EACH	ignore
Forwarding Item IEs		<maxnoofrabs></maxnoofrabs>				
>>RAB ID	Μ		9.2.1.2		-	
>>Transport Layer	M		9.2.2.1	IPv6 or IPv4	-	
Address				address if no		
				other TLA		
				included.		
				IPv4 address		
				if other TLA		
				included.		
>>lu Transport	M		9.2.2.2	Related to	-	
Association				ILA above.		
>>Transport Layer	0		9.2.2.1	IPv6 address	YES	ignore
Address				it included.		
>>Iu Transport	0		9.2.2.2	Related to	YES	ignore
Association				ILA above.		
Criticality Diagnostics	0		9.2.1.35		YES	ignore

Range bound	Explanation				
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.				

9.2.1.26 MS Classmark 2

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 2	М		OCTET STRING	Contents defined in [108]

9.2.1.27 MS Classmark 3

The coding of this element is described in [108].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 3	М		OCTET STRING	Contents defined in [108]

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Old BSS To New BSS Information	Μ		OCTET STRING	Coded as the Old BSS to New BSS information elements field of the Old BSS to New BSS Information IE defined Contents defined in [11]).

9.2.1.31 L3 Information

The coding of this element is described in [11].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
L3 Information	Μ		OCTET STRING	<u>Coded as the value part of the</u> <u>Layer 3 Information IE</u> <u>Contents defined defined in</u> [11] (i.e. excluding the <u>Element Identifier and the</u> <u>Length fields</u>).