3GPP TSG CN Plenary Meeting #22 **NP-030519**
10th – 12th December 2003 Maui, USA.

Source: TSG CN WG4

Title: Corrections on GTP Enhancements Rel-5

Agenda item: 8.8

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	456		N4-031118	Rel-5	Removal of RAB Context IE in Forward Relocation Request	F	5.7.0
29.060	457		N4-031119	Rel-6	Removal of RAB Context IE in Forward Relocation Request	A	6.2.0

3GPP TSG CN WG4 Meeting #21 **N4-031118**
Bangkok, THAILAND, 27th – 31st October 2003

CR-Form-v7

CHANGE REQUEST

⌘ **29.060** **CR** **456** ⌘ **rev** **-** ⌘ Current version: **5.7.0** ⌘

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

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

Title:	⌘	Removal of RAB Context IE in Forward Relocation Request
Source:	⌘	CN4
Work item code:	⌘	GTP Enhancements
Date:	⌘	15/10/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
Rel-4 *(Release 4)*
Rel-5 *(Release 5)*
Rel-6 *(Release 6)*

Reason for change:	⌘	CR360r1 (to introduce the RAB context in the Forward Relocation Request message in Rel-5) was not correctly implemented. The descriptive text was added to section 7.5.6, but table 29 was not updated. This leads to an inconsistency in 29.060. The RAB Context IE is not needed in this message because: • Sequence Numbers are not provided to the SGSN in the RANAP Relocation Required (which triggers the Forward Relocation Request) • It is not required to forward sequence number in the RANAP Relocation Request (which is triggered by the Forward Relocation Request) • The usual GTP mechanism to forward sequence numbers from Source RNC to Target RNC over SGSNs is the Forward SRNS Context Request message. The current text in section 7.5.6 requests the mandatory provision of PDCP sequence numbers in Forward Relocation Request for RABs that use lossless PCDP. This requirement cannot be fulfilled with the mechanisms described in 23.060. It would require the active retrieval of PDCP sequence numbers from the RNC. This is not foreseen in 23.060 and is also not needed. This is an essential correction.
Summary of change:	⌘	RAB Context is removed from section 7.5.6
Consequences if not approved:	⌘	The description in section 7.5.6 will be inconsistent. Correct implementation of CR 360r1 in 29.060 will impose additional implementation effort on the SGSN which is useless.

Clauses affected:	⌘	

		Y	N			
Other specs affected:	⌘		X	Other core specifications	⌘	
			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

7.5.6 Forward Relocation Request

The old SGSN shall send a Forward Relocation Request to the new SGSN to convey necessary information to perform the SRNS Relocation procedure between new SGSN and Target RNC.

All information elements are mandatory, except PDP Context~~, RAB Context~~ and Private Extension.

The IMSI information element contains the IMSI of the target MS for SRNS Relocation procedure.

The old SGSN shall include a SGSN Address for control plane. The new SGSN shall store this SGSN Address and use it when sending control plane messages for the MS to the old SGSN in the SRNS Relocation procedure.

The Tunnel Endpoint Identifier Control Plane field specifies a tunnel endpoint identifier, which is chosen by the old SGSN. The new SGSN shall include this Tunnel Endpoint Identifier Control Plane in the GTP header of all subsequent control plane messages, which are sent from the new SGSN to the old SGSN.

The MM Context contains necessary mobility management and security parameters. An SGSN supporting the 'Early UE' feature shall include the IMEISV in the MM Context when transferring the IMEISV from the old to the new SGSN.

All active PDP contexts in the old SGSN shall be included as PDP Context information elements. The PDP contexts are included in an implementation dependant prioritized order, and the most important PDP context is placed first. When the PDP Context Prioritization IE is included, it informs the new SGSN that the PDP contexts are sent prioritized. If the new SGSN is not able to maintain active all the PDP contexts received from the old SGSN when it is indicated that prioritization of the PDP contexts is applied, the new SGSN should use the prioritisation sent by old SGSN as input when deciding which PDP contexts to maintain active and which ones to delete. In case no PDP context is active, neither of these IEs shall be included.

~~For each RAB using lossless PDCP context, the old SGSN shall include a RAB Context. If a RAB Context is included in the Forward Relocation Request, the new SGSN shall ignore the PDCP and GTP-U sequence numbers received in the PDP Context.~~

UTRAN transparent container, Target identification and RANAP Cause are information from the source RNC in the old SGSN.

Charging Characteristics IE contains the charching characteristics which apply for a PDP context; see 3GPP TS 32.215 [18]. One Charging Characteristics IE shall be included per PDP context IE. If no PDP context is active, this IE shall not be included. The mapping of a Charging Characteristics IE to a PDP Context IE is done according to the sequence of their appearance, e.g. the first Charging Characteristics IE is mapped to the first PDP Context IE.

The optional Private Extension contains vendor or operator specific information.

Table 29: Information Elements in a Forward Relocation Request

Information element	Presence requirement	Reference
IMSI	Mandatory	7.7.2
Tunnel Endpoint Identifier Control Plane	Mandatory	7.7.14
RANAP Cause	Mandatory	7.7.18
Charging Characteristics	Optional	7.7.23
MM Context	Mandatory	7.7.28
PDP Context	Conditional	7.7.29
SGSN Address for Control plane	Mandatory	7.7.32
Target Identification	Mandatory	7.7.37
UTRAN transparent container	Mandatory	7.7.38
PDP Context Prioritization	Optional	7.7.45
Private Extension	Optional	7.7.46

3GPP TSG CN WG4 Meeting #21 **N4-031119**
Bangkok, THAILAND, 27th – 31st October 2003

CR-Form-v7

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Source:	⌘	CN4
Work item code:	⌘	GTP Enhancements
Date:	⌘	15/10/2003
Category:	⌘	**A**
Release:	⌘	Rel-6

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		Y	N			
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Other comments:	⌘					

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The MM Context contains necessary mobility management and security parameters. An SGSN supporting the 'PUESBINE' feature (see 3GPP TS 23.195 [xx] for more information) shall include the IMEISV in the MM Context when transferring the IMEISV from the old to the new SGSN.

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