3GPP TSG-CN Meeting #25   **NP-040379**
8th – 10th September 2004. Palm Springs, USA.

Source:	**TSG CN WG1**
Title:	**CR on Rel-6 WI "GTP Enhancements" towards TS 24.008**
Agenda item:	**9.22**
Document for:	**APPROVAL**

This document contains **1 CR on Rel-6 Work Item "GTP Enhancements"**, that has been agreed by TSG CN WG1 CN#35 meeting and forwarded to TSG CN Plenary meeting #25 for approval.

TDoc #	Tdoc Title	Spec	CR #	Rev	CAT	Current version	WI	Rel
N1-041627	Correction to list of received N-PDU number in Rau Accept message	24.008	886	2	F	6.5.0	GTP Enhancements	Rel-6

CR-Form-v7.1

CHANGE REQUEST

⌘ **24.008** CR **886** ⌘ **rev** **2** ⌘ Current version: **6.5.0** ⌘

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

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

Title: ⌘	**Correction to list of received N-PDU number in Rau Accept message**	
Source: ⌘	**HUAWEI**	
Work item code: ⌘	**GTP Enhancements**	*Date:* ⌘ **20/07/2004**
Category: ⌘ **F**		*Release:* ⌘ **Rel-6**

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

Use one of the following releases:
  Ph2 (GSM Phase 2)
  R96 (Release 1996)
  R97 (Release 1997)
  R98 (Release 1998)
  R99 (Release 1999)
  Rel-4 (Release 4)
  Rel-5 (Release 5)
  Rel-6 (Release 6)
  Rel-7 (Release 7)

Reason for change: ⌘	The following errors need to be corrected in TS 24.008. These errors are related to List of Receive N-PDU numbers in INTER RAU and INTER SYSTEM CHANGE.

List of Receive N PDU Numbers in Rau Accept message
< extract from TS 24.008 >
This IE shall be included in case of an inter SGSN routing area updating, if there are PDP contexts that have been activated in acknowledged transfer mode.
< end of extract >

TS 23.060 specifies that List of Receive N-PDU Number should also be included in UMTS to GSM Intra SGSN Change.

UMTS to GSM Intra SGSN Change
< extract from TS 23.060 >

The 2G+3G-SGSN validates the MS's presence in the new RA. If due to roaming restrictions the MS is not allowed to be attached in the RA, or if subscription checking fails, the 2G+3G-SGSN rejects the routeing area update with an appropriate cause. If all checks are successful, the 2G+3G-SGSN updates MM and PDP contexts for the MS. A new P-TMSI may be allocated. A logical link is established between the new 2G+3G-SGSN and the MS. The establishment procedure is initiated by 2G+3G-SGSN. A Routeing Area Update Accept (P-TMSI, P-TMSI Signature, Receive N-PDU Number (= converted PDCP-SNU)) message is returned to the MS. Receive N-PDU Number contains the acknowledgements for each acknowledged-mode NSAPI used by the MS,

		thereby confirming all mobile-originated N-PDUs successfully transferred before the start of the update procedure. **< end of extract >** In TS 24.008 , N-PDU numbers shall be included in case of an inter SGSN routing area updating. In fact, in the case of UMTS to GSM Intra SGSN Change, when 3g system changes to 2G system, list of Receive N-PDU Numbers shall be included in Rau Accept message as well. Lacked of list of N-PDU numbers in Rau accept message, intersystem change will fail. The description in TS 24.008 about list of receive N-PDU numbers is not compatible with the descriptions in TS 23.060.
Summary of change: ⌘		Correct the description of List of Receive N-PDU numbers in Rau Accept message in 24.008
Consequences if *not approved:*	⌘	UMTS to GSM Intra SGSN Change problems; Intersystem change will fail lacking of List of Receive N-PDU numbers.

Clauses affected:	⌘	9.4.15,		

		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.

<div style="border: 1px solid black; text-align: center;">

*** First Modification ***

</div>

9.4.15   Routing area update accept

This message is sent by the network to the MS to provide the MS with GPRS mobility management related data in response to a *routing area update request* message. See table 9.4.15/3GPP TS 24.008.

Message type: ROUTING AREA UPDATE ACCEPT

Significance: dual

Direction: network to MS

Table 9.4.15/3GPP TS 24.008: ROUTING AREA UPDATE ACCEPT message content

IEI	Information Element	Type/Reference	Presence	Format	Length
	Protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip indicator	Skip indicator 10.3.1	M	V	1/2
	Routing area update accept message identity	Message type 10.4	M	V	1
	Force to standby	Force to standby 10.5.5.7	M	V	1/2
	Update result	Update result 10.5.5.17	M	V	1/2
	Periodic RA update timer	GPRS Timer 10.5.7.3	M	V	1
	Routing area identification	Routing area identification 10.5.5.15	M	V	6
19	P-TMSI signature	P-TMSI signature 10.5.5.8	O	TV	4
18	Allocated P-TMSI	Mobile identity 10.5.1.4	O	TLV	7
23	MS identity	Mobile identity 10.5.1.4	O	TLV	7-10
26	List of Receive N-PDU Numbers	Receive N-PDU Number list 10.5.5.11	O	TLV	4 - 19
17	Negotiated READY timer value	GPRS Timer 10.5.7.3	O	TV	2
25	GMM cause	GMM cause 10.5.5.14	O	TV	2
2A	T3302 value	GPRS Timer 2 10.5.7.4	O	TLV	3
8C	Cell Notification	Cell Notification 10.5.5.21	O	T	1
4A	Equivalent PLMNs	PLMN List 10.5.1.13	O	TLV	5-47
32	PDP context status	PDP context status 10.5.7.1	O	TLV	4
B-	Network feature support	Network feature support 10.5.5.23	O	TV	1
34	Emergency Number List	Emergency Number List 10.5.3.13	O	TLV	5-50

9.4.15.1   P-TMSI signature

This IE may be included to assign an identity to the MS's GMM context.

9.4.15.2   Allocated P-TMSI

This IE may be included to assign a P-TMSI to an MS in case of a GPRS or combined routing area updating procedure.

9.4.15.3   MS identity

This IE may be included to assign or unassign a TMSI to a MS in case of a combined routing area updating procedure.

9.4.15.4   List of Receive N-PDU Numbers

This IE shall be included in case of an inter SGSN routing area updating from A/Gb mode to A/Gb mode, or inter SGSN routing area updating from Iu mode to A/Gb mode, or intra SGSN routing area updating from Iu mode to A/Gb mode, if there are PDP contexts that have been activated in LLC acknowledged transfer mode.

9.4.15.5   Negotiated READY timer value

This IE may be included to indicate a value for the READY timer.

9.4.15.6   GMM cause

This IE shall be included if the combined GPRS routing area updating procedure was successful for GPRS services only.

9.4.15.7   T3302 value

This IE may be included to indicate a value for the T3302 timer.

9.4.15.8   Cell Notification (GSM only)

In GSM, this IE shall be included if by the SGSN in order to indicate the ability to support the Cell Notification.

9.4.15.9   Equivalent PLMNs

The *Equivalent PLMNs* information element is included if the network wants to inform the mobile station of equivalent PLMNs.

9.4.15.10   PDP context status

This IE shall be included by the NW.

9.4.15.11   Network feature support

This IE may be included to inform the MS of the support of certain features. If this IE is not included then the respective features are not supported.

9.4.15.12   Emergency Number List

This IE may be sent by the network. If this IE is sent, the contents of this IE indicates a list of emergency numbers valid within the same MCC as in the cell on which this IE is received.