NP-030498

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

Source:	TSG CN WG4
Title:	Corrections on Location Services
Agenda item:	7.4
Document for:	APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.010	093		N4-031164	Rel-4	Wrong message appears in message flow	F	4.6.0
29.010	094		N4-031165	Rel-5	Wrong message appears in message flow	А	5.4.0
29.010	095		N4-031166	Rel-6	Wrong message appears in message flow	А	6.0.0

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

N4-031164

			(HAN	GE	RE	QUE	EST	Γ				CR-Form-v7
ж		29.01				жrе\		Ħ		irrent vers	sion:	<mark>4.6.0</mark>	ж
For <u>HELP</u> or	า นร	sing this f	orm, see	bottom o	of this	page	or lool	cat th	he po	op-up text	t over	the sy	mbols.
Proposed chang	ie a	affects:	UICC a	pps #		ME	Ra	adio A	Acce	ess Netwo	rk	Core N	letwork X
Title:	Ж	Wrong r	nessage	appears	<mark>in me</mark>	essage	flow						
Source:	Ж	CN4											
Work item code:	ж	LCS1								Date: #	14/	10/2003	
Category:		Use <u>one</u> c F (cc A (cc B (a C (ft	prrection) prrespond ddition of Inctional I ditorial ma xplanatio	ls to a corr feature), modificatio pdification) ns of the a	rectior n of fe	n in an eature)			l	elease: # Use <u>one</u> of 2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	the fo (GSN (Rele (Rele (Rele (Rele (Rele (Rele)))

Reason for change: #	This is an essential correction.
_	In the second paragraph of clause 4.9.5.4 is mentioned that:
	If the request fails, either because the RNS-B cannot return the requested De- ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure 67d.
	This is wrong. According to 3GPP TS 25.413 clause 8.31.3, the received RANAP message in case of positioning failure is LOCATION RELATED DATA FAILURE and not LOCATION RELATED DATA RESPONSE.
Summary of change: ೫	Revise the text and add a figure to describe the correct signalling sequence. Renumber figure captions.
Consequences if % not approved:	-Misalignment between 3GPP TSs 29.010 and 25.413. -Confused implementors possibly resulting in faulty implementation.
Clauses affected: %	4.9.5.4
	YN
Other specs #	X Other core specifications %

Other specs	æ	Y	N	Other core specifications	ж	
•	~~				ሙ	
affected:			Х	Test specifications		
			Χ	O&M Specifications		
	_					
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.

*** Quoted text from TS 25.413 provided for information ***

8.31.3 Unsuccessful Operation

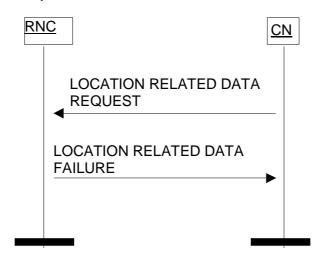


Figure 38: Location Related Data procedure. Unsuccessful operation.

If the RNC was not able to successfully deliver the requested dedicated assistance data to the UE, or if the RNC is not able to provide the requested deciphering keys, the RNC shall send LOCATION RELATED DATA FAILURE message including *Cause* IE to the CN. The *Cause* IE shall indicate the appropriate cause value to CN, e.g. "Dedicated Assistance data Not Available" or "Deciphering Keys Not Available".

*** Quotation end ***

*** Modification Start***

4.9.5.4 Inter-MSC SRNS Relocation

After a successful Inter-MSC SRNS Relocation, any request of Assistance Data or De-ciphering keys received by the non anchor 3G MSC via the DTAP message LCS-MOLR is handled as described in section 4.9.4.4.

If the request fails, either because the RNS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure $6\underline{8b74}$.

G MSC-A 3G M	ISC-B	
	LCS-MOLR	
	<	
1AP PROCESS ACCESS		
SIGNALLING		
<pre>-an-APDU(LCS-MOLR)</pre>		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LOCATION RELATED		
DATA REQUEST)		RNS-B
~ '		
		->
	LOCATION RELATE	D
	DATA REQUEST	
		+
		If Assistance Data we
		requested then Delivery of Assistance
		Data to UE
		+
	<	
	LOCATION RELATE	D
	DATA FAILURE	
MAP PROCESS ACCESS SIGNALLING		
<		
-an-APDU(LOCATION RELATED		
DATA FAILURE)		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LCS-MOLR Response)		
<u> </u>	LCS-MOLR Re	sponse

Figure 68b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.

If the request fails, either because the BSS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or BSS-B cannot deliver the required Assistance Data to the MS, the signalling is as shown in figure 68<u>c</u>b.

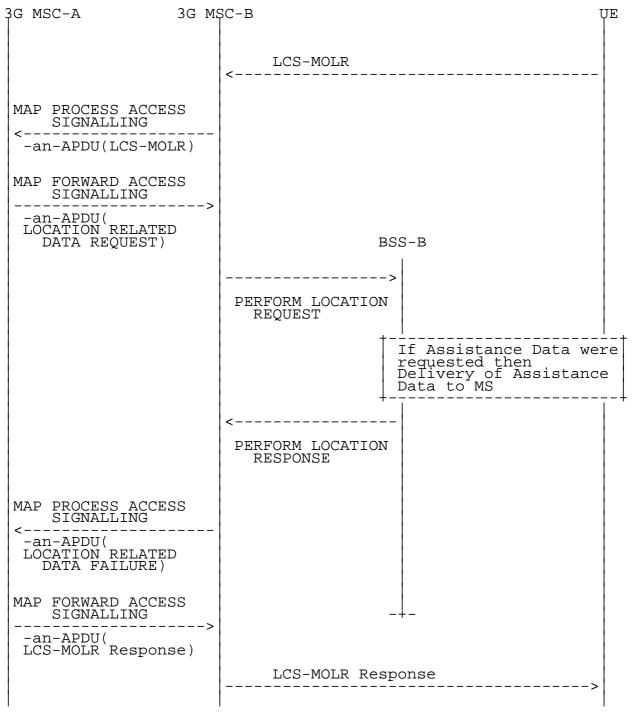


Figure 68<u>c</u>b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.



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

N4-031165

	CHANGE REQUEST	CR-Form-v7
æ	29.010 CR 094 * rev - * Cu	urrent version: 5.4.0 [#]
For <u>HELP</u> or	using this form, see bottom of this page or look at the p	pop-up text over the % symbols.
Proposed chang	e affects: UICC apps % ME Radio Acce	ess Network Core Network X
Title:	Wrong message appears in message flow	
Source:	₩ CN4	
Work item code:	쁐 <mark>LCS1</mark>	Date: # 14/10/2003
Category:		Release: %Rel-5Use one 2of the following releases: 22(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: #	In the second paragraph of clause 4.9.5.4 is mentioned that:				
J	······································				
	If the request fails, either because the RNS-B cannot return the requested De-				
	ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required				
	Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure 67d.				
	case and is shown in lighte ord.				
	This is wrong. According to 3GPP TS 25.413 clause 8.31.3, the received RANAP				
	message in case of positioning failure is LOCATION RELATED DATA FAILURE				
	and not LOCATION RELATED DATA RESPONSE.				
Summary of change: #	Revise the text and add a figure to describe the correct signalling sequence.				
Caminary of change.	Renumber figure captions.				
Consequences if #					
not approved:	-Confused implementors possibly resulting in faulty implementation.				
Clauses affected: #	4.9.5.4				
Clauses allected. m	4.9.0.4				
	ΥΝ				
Other specs %	X Other core specifications %				
affected:	X Test specifications				
	X O&M Specifications				
Other commenter 99					
Other comments: %					

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.

*** Quoted text from TS 25.413 provided for information ***

8.31.3 Unsuccessful Operation

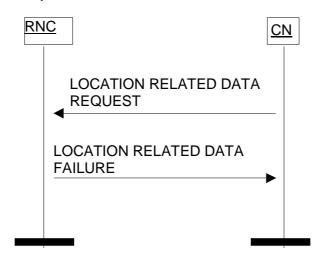


Figure 38: Location Related Data procedure. Unsuccessful operation.

If the RNC was not able to successfully deliver the requested dedicated assistance data to the UE, or if the RNC is not able to provide the requested deciphering keys, the RNC shall send LOCATION RELATED DATA FAILURE message including *Cause* IE to the CN. The *Cause* IE shall indicate the appropriate cause value to CN, e.g. "Dedicated Assistance data Not Available" or "Deciphering Keys Not Available".

*** Quotation end ***

*** Modification Start***

4.9.5.4 Inter-MSC SRNS Relocation

After a successful Inter-MSC SRNS Relocation, any request of Assistance Data or De-ciphering keys received by the non anchor 3G MSC via the DTAP message LCS-MOLR is handled as described in section 4.9.4.4.

If the request fails, either because the RNS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure $6\underline{8b74}$.

G MSC-A 3G M	ISC-B	
	LCS-MOLR	
	<	
1AP PROCESS ACCESS		
SIGNALLING		
<pre>-an-APDU(LCS-MOLR)</pre>		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LOCATION RELATED		
DATA REQUEST)		RNS-B
~ '		
		->
	LOCATION RELATE	D
	DATA REQUEST	
		+
		If Assistance Data we
		requested then Delivery of Assistance
		Data to UE
		+
	<	
	LOCATION RELATE	D
	DATA FAILURE	
MAP PROCESS ACCESS SIGNALLING		
<		
-an-APDU(LOCATION RELATED		
DATA FAILURE)		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LCS-MOLR Response)		
<u> </u>	LCS-MOLR Re	sponse

Figure 68b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.

If the request fails, either because the BSS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or BSS-B cannot deliver the required Assistance Data to the MS, the signalling is as shown in figure 68<u>c</u>b.

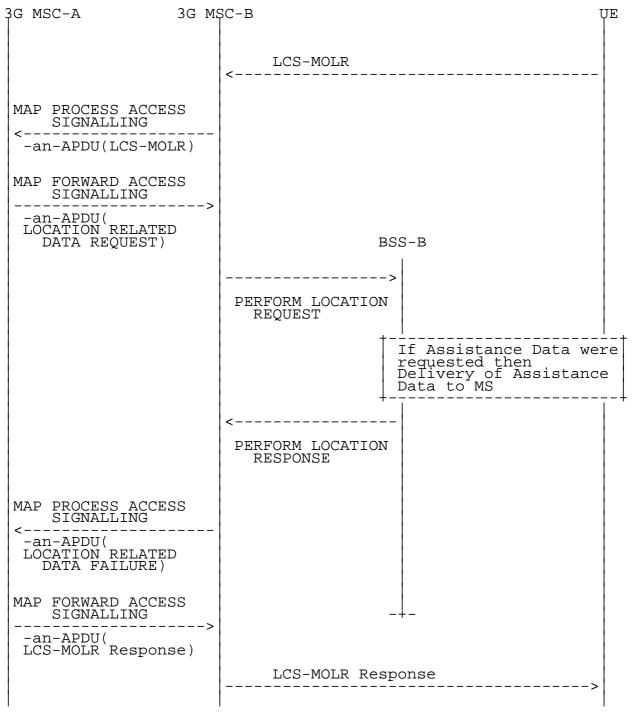


Figure 68<u>c</u>b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.



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

N4-031166

	CHANGE REQUEST		CR-Form-v7
¥	29.010 CR 095 # rev - ^{# Cu}	urrent versio	^{n:} 6.0.0 [*]
For <u>HELP</u> or	using this form, see bottom of this page or look at the p	op-up text o	ver the X symbols.
Proposed chang	e affects: UICC apps % ME R adio Acce	ess Network	Core Network X
Title:	Wrong message appears in message flow		
Source:	# CN4		
Work item code:	# LCS1	Date: ೫	14/10/2003
Category:		Use <u>one</u> of th 2 (C R96 (F R97 (F R98 (F R99 (F ReI-4 (F ReI-5 (F	Rel-6 e following releases: GSM Phase 2) Release 1996) Release 1997) Release 1998) Release 1999) Release 4) Release 5) Release 6)

Reason for change: %	In the second paragraph of clause 4.9.5.4 is mentioned that:			
	If the request fails, either because the RNS-B cannot return the requested De- ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure 67d.			
	This is wrong. According to 3GPP TS 25.413 clause 8.31.3, the received RANAP message in case of positioning failure is LOCATION RELATED DATA FAILURE and not LOCATION RELATED DATA RESPONSE.			
Summary of change: #	Revise the text and add a figure to describe the correct signalling sequence. Renumber figure captions.			
Consequences if % not approved:	-Misalignment between 3GPP TSs 29.010 and 25.413. -Confused implementors possibly resulting in faulty implementation.			
Clauses affected: #	4.9.5.4			
Other specs % affected:	Y N 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 <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.

*** Quoted text from TS 25.413 provided for information ***

8.31.3 Unsuccessful Operation

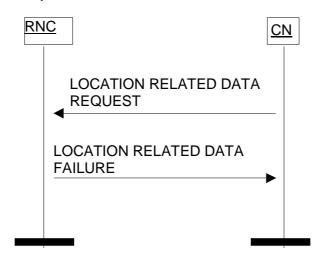


Figure 38: Location Related Data procedure. Unsuccessful operation.

If the RNC was not able to successfully deliver the requested dedicated assistance data to the UE, or if the RNC is not able to provide the requested deciphering keys, the RNC shall send LOCATION RELATED DATA FAILURE message including *Cause* IE to the CN. The *Cause* IE shall indicate the appropriate cause value to CN, e.g. "Dedicated Assistance data Not Available" or "Deciphering Keys Not Available".

*** Quotation end ***

*** Modification Start***

4.9.5.4 Inter-MSC SRNS Relocation

After a successful Inter-MSC SRNS Relocation, any request of Assistance Data or De-ciphering keys received by the non anchor 3G MSC via the DTAP message LCS-MOLR is handled as described in section 4.9.4.4.

If the request fails, either because the RNS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or RNS-B cannot deliver the required Assistance Data to the MS, the signalling is the same as for the successful case and is shown in figure $6\underline{8b74}$.

G MSC-A 3G M	ISC-B	
	LCS-MOLR	
	<	
1AP PROCESS ACCESS		
SIGNALLING		
<pre>-an-APDU(LCS-MOLR)</pre>		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LOCATION RELATED		
DATA REQUEST)		RNS-B
~ '		
		->
	LOCATION RELATE	D
	DATA REQUEST	
		+
		If Assistance Data we
		requested then Delivery of Assistance
		Data to UE
		+
	<	
	LOCATION RELATE	D
	DATA FAILURE	
MAP PROCESS ACCESS SIGNALLING		
<		
-an-APDU(LOCATION RELATED		
DATA FAILURE)		
MAP FORWARD ACCESS SIGNALLING		
>		
-an-APDU(LCS-MOLR Response)		
<u> </u>	LCS-MOLR Re	sponse

Figure 68b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.

If the request fails, either because the BSS-B cannot return the requested De-ciphering Keys to the anchor 3G MSC or BSS-B cannot deliver the required Assistance Data to the MS, the signalling is as shown in figure 68<u>c</u>b.

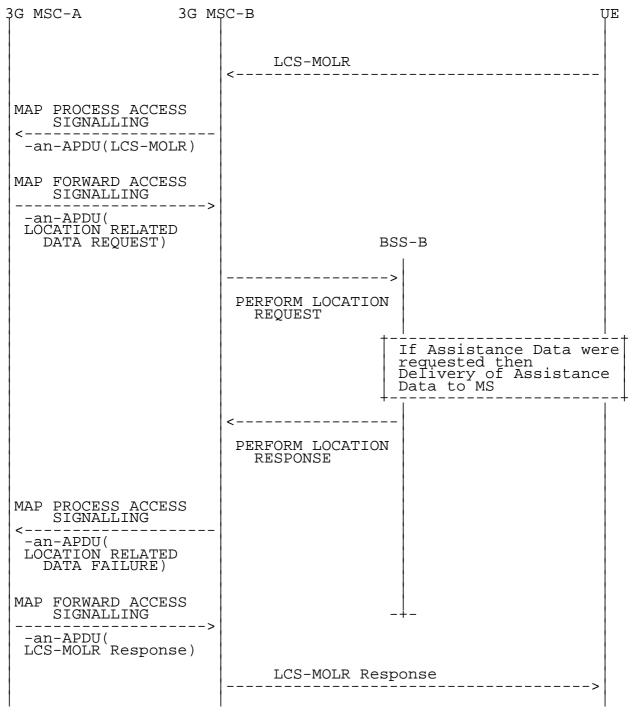


Figure 68<u>c</u>b: Signalling for the request of Assistance Data or De-ciphering Keys

After the inter-MSC SRNS Relocation, the 3G MSC-B can perform intra-MSC UMTS to GSM handover. Any request for Assistance Data or De-ciphering keys received after completion of the intra-MSC UMTS to GSM requires that at the non anchor 3G MSC the received RANAP messages are mapped into the corresponding BSSMAP messages to be sent to the BSS, and the received BSSMAP messages are mapped into the corresponding RANAP messages to be sent over the E-interface to the anchor 3G-MSC.

