Tdoc NP-010270

3GPP TSG CN Plenary Meeting #12, Stockholm, Sweden 13th - 15th June 2001

Source: TSG CN WG 1

Title: CRs to R99 (with mirror CR) on Work Item Handover towards 23.009

Agenda item: 7.14

Document for: APPROVAL

Introduction:

This document contains 2 CRs on R99 with a mirror CR to Work Item "Handover", that have been agreed by TSG CN WG1, and are forwarded to TSG CN Plenary meeting #12 for approval.

Spec	CR	Rev	Doc-2nd-	Phase	Subject	Cat	Version-	Workitem
			Level				Current	
23.009	034	3	N1-010913		Indication of Intra MSC handover from 3G_MSC-B to MSC-A/3G_MSC-A	F	3.6.0	Handover
23.009	035	3	N1-010914		Indication of Intra MSC handover from 3G_MSC-B to MSC-A/3G_MSC-A	Α	4.0.0	Handover

	CHANGE REQUEST
	CHANGE REQUEST
×	23.009 CR 034 # rev 3 # Current version: 3.6.0 #
For HELP on u	using this form, see bottom of this page or look at the pop-up text over the X symbols.
Proposed change	affects: ### (U)SIM ME/UE Radio Access Network Core Network x
Title: #	Indication of Intra MSC handover from 3G_MSC-B to MSC-A/3G_MSC-A
Source: #	Nokia Nokia
Work item code: ₩	B Handover Date: ## 14.052001
Category: Ж	Release: # R99
	Use one of the following categories: F (essential 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)
Reason for change	The GSM channel mode configuration may change during intra GSM handovers. The chosen channel needs to be known by the interworking function (IWF) located in the anchor MSC (MSC-A or 3G-MSC-A). Also the selected encryption algorithm may change during intra GSM handovers. This information needs also to be known by the anchor MSC (MSC-A or 3G-MSC-A). For 3G-MSC-B to inform MSC-A or 3G-MSC-A of chosen channel and selected encryption algorithm shall be sent to MSC-A or 3G-MSC-A in A_Handover_Performed and MAP_PROCESS_ACCESS_SIGNALLING_REQUEST By the 3G-MSC-B.
Summary of chang	In section 4.4.1 "Role of 3G_MSC-B" the text which is underlined below has been added: 3G_MSC-B notifies MSC-A or 3G_MSC-A of intra-3G_MSC-B InterSystem handover and intra GSM handovers, by using the A_HANDOVER_PERFORMED message. If BSSMAP is used on the E-interface, 3G_MSC-B notifies MSC-A or 3G_MSC-A of intra-3G_MSC-B intra UMTS relocations (if security algorithms have been changed), by using the A_HANDOVER_PERFORMED message and indicating the selected UMTS algorithm(s) in MAP_PROCESS_ACCESS_SIGNALLING_REQUEST. If RANAP is used on the E-interface, 3G_MSC-B notifies 3G_MSC-A of intra-3G_MSC-B intra UMTS relocations (if security algorithms have been changed), by using the LOCATION REPORT message and indicating the selected UMTS algorithm(s) in MAP_PROCESS_ACCESS_SIGNALLING_REQUEST. In case of intra-3G_MSC-B intra UMTSSRNS relocation, if security algorithms have been changed then: a) When BSSMAP is used on the E-interface, the A_HANDOVER_PERFORMED

message shall be sent.

b) When RANAP is used on the E interface, the LOCATION REPORT message shall be sent.

<u>In both cases, the selected UMTS algorithm(s) shall be indicated in the MAP_PROCESS_ACCESS_SIGNALLING_REQUEST.</u>

Consequences if not approved:

X IWF located in anchor MSC can not adapt to the changes of channel configuration potentially taking place during intra 3G-MSC intra GSM handovers. Anchor MSC is not aware of currently used encryption algorithm.

Clauses affected:	₩ 4.4.1							
Other specs affected:	X Other core specificationsTest specificationsO&M Specifications							
Other comments:	X There are related CRs to TS 29.002 and TS 29.010 which will be handled in the CN4 # 8.							
	This change request is also related to the discussion paper presented in this meeting (TSCN1 R99 and older Ad-hoc), N1-010597. Additionally, in the situation where an inter MSC SRNC relocation has been performed and a subsequent handover to GSM is performed, the location of MS may not be known by the anchor MSC since the location reporting does not support cell based location reporting (only based on SAI, which does not exist in GSM).							

4.4 3G MSC-B

For roles and functional composition of the 3G_MSC-B working as pure GSM MSC, please see previous clause ("MSC-B").

4.4.1 Role of 3G_MSC-B

In the Intra-3G_MSC handover/relocation case, the 3G_MSC-B keeps the control of the whole Intra-3G_MSC handover/relocation procedure. 3G_MSC-B notifies MSC-A or 3G_MSC-A of intra-3G_MSC-B InterSystem handover and intra GSM handovers, by using the A_HANDOVER_PERFORMED message.

If BSSMAP is used on the E-interface, 3G_MSC-B notifies MSC-A or 3G_MSC-A of intra-3G_MSC-B intra UMTS relocations (if security algorithms have been changed), by using the A_HANDOVER_PERFORMED message and indicating the selected UMTS algorithm(s) in MAP_PROCESS_ACCESS_SIGNALLING_REQUEST.

If RANAP is used on the E-interface, 3G_MSC-B notifies 3G_MSC-A of intra-3G_MSC-B intra UMTS relocations (if security algorithms have been changed), by using the LOCATION REPORT message and indicating the selected UMTS algorithm(s) in MAP_PROCESS_ACCESS_SIGNALLING_REQUEST.

In case of intra-3G_MSC-B intra UMTSSRNS relocation, if security algorithms have been changed then:
a) When BSSMAP is used on the E interface, the A_HANDOVER_PERFORMED message shall be sent.
b) When RANAP is used on the E interface, the LOCATION REPORT message shall be sent.
In both cases, if security algorithms have been changed, the selected UMTS algorithm(s) shall be indicated in the MAP_PROCESS_ACCESS_SIGNALLING_REQUEST.

******	Next	Modified	Section	********
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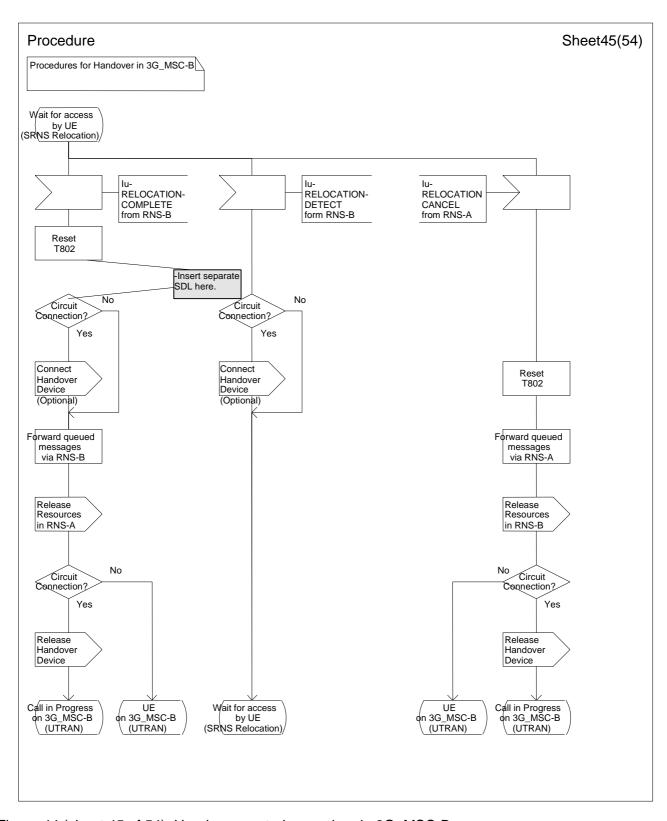
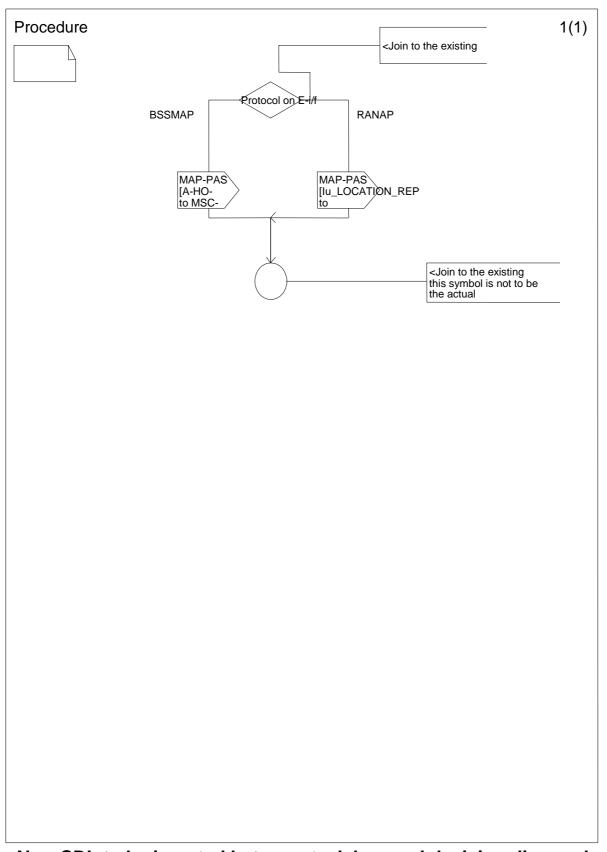


Figure 44 (sheet 45 of 54): Handover control procedure in 3G_MSC-B



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Source:	₩ No	okia									
Work item code:	₭ Ha	andover						Date: ₩	15.0	52001	
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Reason for chang	ge: ¥	The cho anchor I Also the informa For 3G-encrypti and MA	M channel resen channel resen channel MSC (MSC-excepted ention needs a MSC-B-to-on algorithm P_PROCES GG-MSC-B-	needs to be -A or 3G-M acryption alg lso to be kn inform MSon shall be so	e known SC-A). gorithm own by C-A or :	may chathe anch	ange du hor MS	orking func uring intra SC (MSC-A chosen cha ISC-A in A	tion (IV GSM h A or 3G	WF) locat nandovers i-MSC-A	ed in <u>the</u> . This).
Summary of char	nge: #	3G_MS and intra-3G using the algorith: If RAN. B intra LUCAT MAP_P	C-B notifies a GSM hand AP is used a HAND m(s) in MAAP is used a UMTS reloction REPOROCESS_A	on the E-in tra UMTS I OVER_PEI P_PROCES on the E-inte cations (if se RT message	3G_MS sing the terface, relocation RFORM S_ACC orface, 3 recurity a e and inv GNALI	SC-A of A_HAN 3G_MS ons (if se IED mes IESS_SI G_MSC Igorithm dicating LING_R	intra-3 NDOV C-B not ecurity ssage a GNAL C-B not as have the sel	G_MSC-FER_PERFORMS algorithms nd indicati LING_RE ifies 3G_N been char ected_UM ST.	3 InterSORME C-A or have to h	System ha D messag 3G MSC been chan selected T. of intra-3 by using t orithm(s)	ndover ge. CA of ged), by UMTS GG_MSC- he in

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- b) When RANAP is used on the E interface, the LOCATION REPORT message shall be sent.

In both cases, if security algorithms have been changed, the selected UMTS algorithm(s) shall be indicated in the MAP PROCESS ACCESS SIGNALLING REQUEST.

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<u>In case of intra-3G_MSC-B intra UMTS-SRNSrelocation</u>, if security algorithms have been changed:

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In both cases, if security algorithms have been changed, the selected UMTS algorithm(s) shall be indicated in the MAP PROCESS ACCESS SIGNALLING REQUEST.

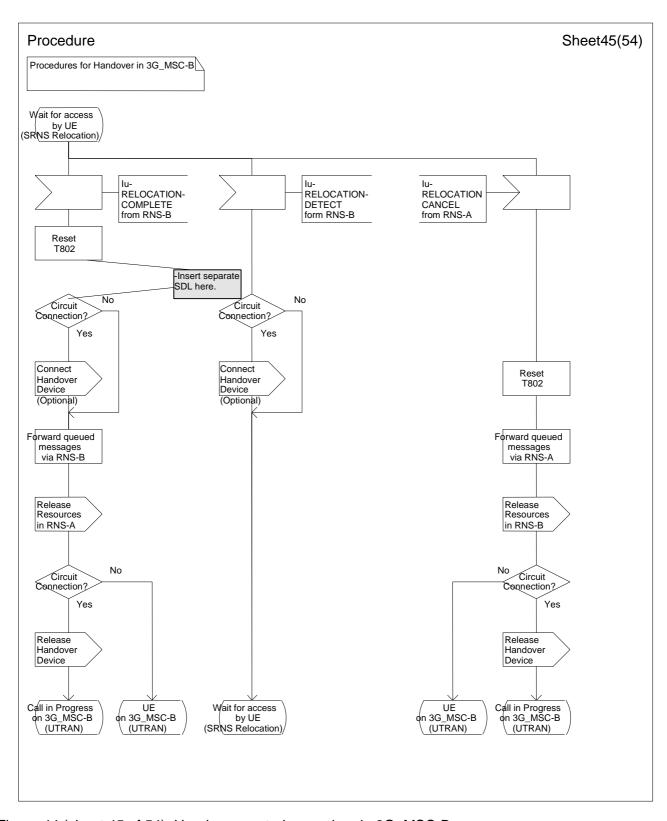
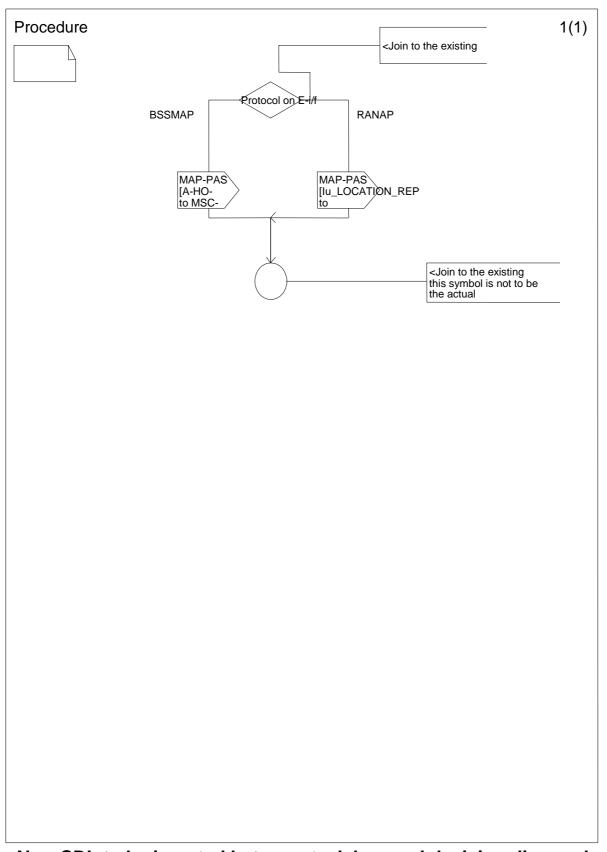


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