Source: TSG CN WG 1

Title: CR to R99 (with mirror CRs) on Work Item GSM/UMTS interworking towards

29.018

Agenda item: 7.15

Document for: APPROVAL

Introduction:

This document contains 3 CRs on R99 (with mirror CRs) to Work Item "GSM/UMTS interworking", that have been agreed by TSG CN WG1, and are forwarded to TSG CN Plenary meeting #15 for approval.

Spec	CR	Rev	Phase	Subject	Cat	Version-	Version-	Doc-2nd-
						Current	New	Level
29.018	026		R99	Addition of missing Mobile Station States for UMTS	F	3.8.0	3.9.0	N1-020199
29.018	027		Rel-4	Addition of missing Mobile Station States for UMTS	Α	4.2.0	4.3.0	N1-020200
29.018	028		Rel-5	Addition of missing Mobile Station States for UMTS	Α	5.0.0	5.1.0	N1-020201

3GPP TSG-CN1 Meeting #22

Sophia Antipolis, France, 28. January - 1. February 2002

	CHANGE REQUEST	CR-Form-v5
*	29.018 CR 026	. 0 #
For <u>HELP</u> on us	ng this form, see bottom of this page or look at the pop-up text over the %	symbols.
Proposed change a	fects: 第 (U)SIM ME/UE Radio Access Network Core	Network X
Title: 第	Addition of Mobile Station States for UMTS	
Source: #	Siemens AG	
Work item code: ₩	GSM/UMTS interworking Date: 21.01.02	
1	Release: # R99 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) P (editorial modification) D (editorial modification) P (etailed explanations of the above categories can e found in 3GPP TR 21.900). Release: # R99 Use one of the following of the following 2 (Release 19 R97 (Release 19 R98 (Release 19 R99 (Release 19 REL-4 (Release 4) REL-5 (Release 5)	e 2) 96) 97) 98)
Reason for change:	According to the standard, the <i>Mobile Station States</i> IE should be incomediated MS Information Response message, irrespective of the information response to the current version of TS 29.018 specifies only values for the GMM states PRICE STANDBY, SUSPENDED and READY, but not for the PMM states PRICE DETACHED, PMM-CONNECTED and PMM-IDLE; therefore, it is under to encode in the information element, if the MS is served by a UTRAN Furthermore, subclause 14.3 is incorrectly referring to a "MS status" in the matter of the properties of the information element.	equested. states IDLE, MM- clear, what N.
Summary of change	From the SGSN's point of view, it is not possible to discriminate between PMM-DETACHED. Furthermore, if a routing area contains both UMTS cells, it is not possible to discriminate between STANDBY and IDLE; therefore, it is proposed to redefine the existing codepoints: IDLE -> IDLE or PMM-DETACHED STANDBY -> STANDBY or PMM-IDLE READY -> READY or PMM-CONNECTED.	GSM and
Consequences if not approved:	# Functionality which should be part of R99 is missing.	
Clauses affected:	3 14.3, 18.4.19	
Other specs affected:	# Other core specifications # Test specifications 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/3G_Specs/CRs.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.

14.3 Procedures in the SGSN

The SGSN shall examine the type of information that is requested and if it is stored in its database shall use this information in its response to the VLR. The BSSAP+-MS-INFORMATION-RESPONSE message contains the information parameters as requested by the VLR. In A/Gb mode, the Mobile location information indicates a request for Cell Global Identity and Location information age. In Iu mode, the Mobile location information indicates a request for Service Area Identification and Location information age. In this case, the SGSN shall use the Location Report Control procedure (see 3GPP TS 25.413) in order to retrieve the SA.

If the SGSN receives an Information requested information element containing a 'not supported' value, then the value part of the Mobile station state information element in the BSSAP+-MS-INFORMATION-RESPONSE message shall be set to 'Information requested not supported'.

If the information is not locally available and it is a request for mobile identity information, the SGSN forwards the IDENTITY REQUEST message to the MS indicated in the message unless the GPRS activities of the MS are suspended. Upon receipt of the IDENTITY RESPONSE message from the MS, the SGSN shall send a BSSAP+-MS-INFORMATION-RESPONSE message contains the information parameters as requested by the VLR. If the GPRS activities of the MS are suspended the SGSN shall return a BSSAP+-MS-INFORMATION-RESPONSE message indicating in the Mobile station State IE 'SUSPENDED'. If the requested information is not available or obtainable at the SGSN, the SGSN shall return a BSSAP+-MS-INFORMATION-RESPONSE message to the VLR without the requested information. The SGSN should include the Mobile station state MS status IE in all BSSAP+-MS-INFORMATION-RESPONSE messages.

If the IMSI is not known at the SGSN, the SGSN shall return a BSSAP+-MS-INFORMATION-RESPONSE message indicating in the <u>Mobile station</u> state IE 'IMSI unknown'.

18.4.19 Mobile station state

The Mobile station state IE is a TLV IE that indicates to the VLR the GMM and GSM states of the MS in the SGSN. The coding of the V field is as follows.

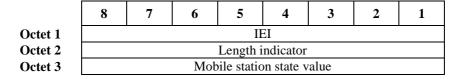


Figure 18.4.19/3GPP TS 29.018: Mobile station state IE

Table 18.4.19/3GPP TS 29.018: Mobile station state IE value part

26.11						
Mobile station state value (octet 3)						
Bits						
87654321						
00000000	IDLE or PMM-DETACHED					
00000001	STANDBY or PMM-IDLE, 0 PDP contexts active					
00000010	STANDBY or PMM-IDLE, 1 or more PDP					
	_contexts active					
00000011	SUSPENDED, 0 PDP contexts active					
00000100	SUSPENDED, 1 or more PDP contexts active					
00000101	READY or PMM-CONNECTED, 0 PDP contexts					
	active					
00000110	READY or PMM-CONNECTED, 1 or more PDP					
	contexts active					
00000111	IMSI unknown					
00001000	Information requested not supported					
00001001	Shall not be sent in this version of the protocol.					
to	If received, shall be treated as '00001000'.					
11111111						

3GPP TSG-CN1 Meeting #22 Sophia Antipolis, France, 28. January - 1. February 2002

			(CHAI	NGE	REQ	UE	ST	•			CR-Form-v5
*	29.	018	CR	028	3	∉ rev	-	¥	Current vers	sion:	5.0.0	¥
For <u>HELP</u> on us	sing t	his for	m, see	e bottom	of this p	page or	look	at th	e pop-up text	over	the # sy	mbols.
Proposed change a	iffect	!s: ♯	(U)	SIM	ME/U	JE	Radi	io Ac	cess Network	k	Core N	etwork X
Title: ₩	Add	dition o	f Mob	ile Statio	on States	s for UN	/ITS					
Source: #	Sie	mens /	AG									
Work item code: ₩	GS	M/UM	ΓS inte	erworkin	g				Date: ♯	21.	.01.02	
	Detai	F (corr A (corr B (add C (fund D (edit led exp	rection) respone lition of ctional forial m blanatic	ds to a co f feature) modification	orrection tion of fea on) above c	ature)		elease	Release: ₩ Use <u>one</u> of 2 e) R96 R97 R98 R99 REL-4 REL-5	the for (GSI) (Rele (Rele (Rele (Rele (Rele	L-5 ollowing real M Phase 2, ease 1996, ease 1997, ease 1999, ease 4) ease 5))))
Reason for change.	<i>:</i> ¥	MS II The o STAN DETA to en	nforma curren NDBY ACHE code i	ation Re t versior , SUSPE D, PMM n the inf	sponse of TS 2 SNDED a CONNECTORNATION	messag 29.018 s and RE ECTED n eleme	ge, irrespecif ADY, and F ent, if	espe ies o but i PMM the N	n States IE sheative of the incomply values for the PNI-IDLE; thereforms is served beforeing to a "	form the IM st ore, i by a	ation requ GMM states PMM t is uncleau UTRAN.	uested. tes IDLE, //-
Summary of change	e: #	and F UMT IDLE IDLE	PMM-I S cells ; there	DETACH s, it is no efore, it i -> IDLE -> STA	HED. Fur ot possib	rthermo le to dis sed to re M-DETA r PMM-	ore, if socrimic edefination of the contraction of	a rounate nate ne the D	sible to discrinuting area conbetween STA existing coo	ntains ANDI	s both GS BY and Pl	M and
Consequences if not approved:	Ж	Func	tionali	ty which	should	be part	of R9	99 is	missing.			
Clauses affected:	¥	14.3,	18.4.	19	_							
Other specs affected:	*	Te	st spe	ore spec ecificatio ecificati		s #						
Other comments:	ж											

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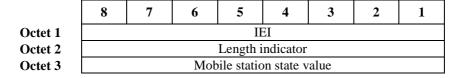


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3GPP TSG-CN1 Meeting #22

Sophia Antipolis, France, 28. January - 1. February 2002

	CHANGE REQUEST
ж 2	9.018 CR 027
For <u>HELP</u> on usin	g this form, see bottom of this page or look at the pop-up text over the ₩ symbols.
Proposed change affe	ects: # (U)SIM ME/UE Radio Access Network Core Network
Title: 第 A	ddition of Mobile Station States for UMTS
Source: # S	iemens AG
Work item code: ₩ 0	SM/UMTS interworking Date: 21.01.02
De	Release: REL-4 e 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) tailed explanations of the above categories can found in 3GPP TR 21.900. REL-4 REL-4 REL-4 REL-4 REL-4 REL-5 (Release 1999) REL-5 REL-5 (Release 5)
Reason for change:	According to the standard, the <i>Mobile Station States</i> IE should be included in the MS Information Response message, irrespective of the information requested. The current version of TS 29.018 specifies only values for the GMM states IDL STANDBY, SUSPENDED and READY, but not for the PMM states PMM-DETACHED, PMM-CONNECTED and PMM-IDLE; therefore, it is unclear, what to encode in the information element, if the MS is served by a UTRAN. Furthermore, subclause 14.3 is incorrectly referring to a "MS status" IE.
Summary of change:	From the SGSN's point of view, it is not possible to discriminate between IDLE and PMM-DETACHED. Furthermore, if a routing area contains both GSM and UMTS cells, it is not possible to discriminate between STANDBY and PMM-IDLE; therefore, it is proposed to redefine the existing codepoints: IDLE -> IDLE or PMM-DETACHED STANDBY -> STANDBY or PMM-IDLE READY -> READY or PMM-CONNECTED.
Consequences if not approved:	Functionality which should be part of R99 is missing.
Clauses affected:	14.3 , 18.4.19
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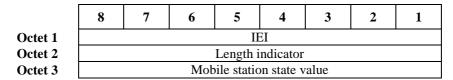


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