3GPP TSG CN Plenary Meeting #19 12th - 14th March 2003 Birmingham, UK.

Source: TSG CN WG4

Title: Corrections on GPRS

Agenda item: 7.3

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.060	384	1	N4-030270	R99	Reinstatement of cause code version not supported	F	3.15.0
29.060	385	1	N4-030271	Rel-4	Reinstatement of cause code version not supported	F	4.6.0
29.060	386	1	N4-030272	Rel-5	Reinstatement of cause code version not supported	Α	5.4.0

3GPP TSG CN WG4 Meeting #18 Dublin, EIRE, 10th – 14th February 2003

CHANGE REQUEST							
*	29.060 CR 384	4	1 * Current	version: 3.15.0 [#]			
For <u>HELP</u> on us	sing this form, see bott	tom of this page or	look at the pop-up	text over the # symbols.			
Proposed change a			Radio Access Ne	twork Core Network X			
Title: #	Reinstatement of cau	use code version no	ot supported				
Source: #	CN4						
Work item code: ₩	GTP enhancements		Date	e: 第 <mark>14/02/2003</mark>			
Category: 第	F Use one of the following F (correction) A (corresponds to B (addition of featu C (functional modific D (editorial modific Detailed explanations of be found in 3GPP TR 21	a correction in an ear ure), fication of feature) eation) the above categories	2 lier release) R96 R97 R98 R99	ne of the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)			
Reason for change	· ¥ Reinstatement (of cause code versi	on not supported				
Summary of chang	e: # Cause code 198 unused in 29.06 codes with 29.0 within this spec. adding a clear s	3 had been deleted 60. Lucent have rea 60 and cause code	from 29.060 follow lized lately that GT 198 ("version not this issue by reins	ving changes that made it 'P' (32.015) shares cause supported") is still used stating this cause code and ared with GTP'.			
Consequences if not approved:	光 There is no way	to use cause code	198 in 32.015				
Clauses affected:	第 7.7.1						
Other specs affected:	Y N X Other core X Test spec X O&M Spe		X				
Other comments:	\mathfrak{A}						

How to create CRs using this form:

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

7.7.1 Cause

In a request, the Cause Value indicates the reason for the request. The Cause shall be included in the request message.

In a response, the Cause Value indicates the acceptance or the rejection of the corresponding request. In addition, the Cause Value may indicate what was the reason for the corresponding request. The Cause value shall be included in the response message.

Cause values are shared with the GTP' protocol specified in 3GPP TS 32.015 [18].

'Request accepted' is returned when a GSN has accepted a control plane request.

'Non-existent' indicates a non-existent or an inactive PDP context.

'IMSI not known' indicates a non-existent MM context.

'MS is GPRS Detached' indicates an idle MM context.

'MS is not GPRS Responding' and 'MS Refuses' may be used by SGSN to reject a Network-Requested PDP Context Activation.

'Version not supported' is returned when the recipient does not recognise the version number in the request message.

'Request IMSI', 'Request IMEI', 'Request IMSI and IMEI' and 'No identity needed' are used by GGSN to notify SGSN what to do.

'No resources available' is a generic temporary error condition e.g. all dynamic PDP addresses occupied or no memory available.

'Service not supported' is a generic error indicated that the GSN do not support the requested service.

'User authentication failed' indicates that the external packet network has rejected the user's service request.

'System failure' is a generic permanent error condition.

'Roaming restriction' indicates that the SGSN cannot activate the requested PDP context because of the roaming restrictions.

'P-TMSI Signature mismatch' is returned if either:

- the P-TMSI Signature stored in the old SGSN does not match the value sent by the MS via the new SGSN
- or the MS does not provide the P-TMSI Signature to the new SGSN while the old SGSN has stored the P-TMSI Signature for that MS.

'Semantic error in the TFT operation', 'Syntactic error in the TFT operation', 'Semantic errors in packet filter(s)' and 'Syntactic errors in packet filters(s)' and 'PDP context without TFT already activated' are indications of abnormal cases involving TFTs. The abnormal TFT cases and the use of the cause codes are defined in 3GPP TS 24.008.

'Invalid message format', 'Mandatory IE incorrect', 'Mandatory IE missing' and 'Optional IE incorrect' are indications of protocol errors described in the section Error handling.

'GPRS connection suspended' indicates that the GPRS activities of the mobile station are suspended.

'Authentication failure' indicates that the user authentication failed in the new SGSN.

'Context not found' indicates that the PDP Context referenced in an Active Secondary Context Request message was not found in the receiving GGSN.

'Relocation failure' indicates that the SRNS relocation failed in the new SGSN side.

'Unknown mandatory extension header' signals in a response message that the corresponding request included an extension header for which comprehension was required but unknown to the receiving end.

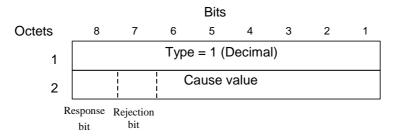


Figure 9: Cause information element

Table 38: Cause Values

	Cause		Value (Decimal)
		Request IMSI	0
		Request IMEI	1
request		Request IMSI and IMEI	2
•		No identity needed	3
		MS Refuses	4
		MS is not GPRS Responding	5
		For future use	6-48
		Cause values reserved for GPRS charging	49-63
		protocol use (see GTP' in GSM 12.15)	.00
For future use	Э		64-127
	acc	Request accepted	128
		For future use	129-176
		Cause values reserved for GPRS charging	177-191
		protocol use (see GTP' in GSM 12.15)	
		Non-existent	192
		Invalid message format	193
response	rej	IMSI not known	194
•	1	MS is GPRS Detached	195
		MS is not GPRS Responding	196
		MS Refuses	197
		Version not supported For future use	198
		No resources available	199
		Service not supported	200
		Mandatory IE incorrect	201
		Mandatory IE missing	202
		Optional IE incorrect	203
		System failure	204
		Roaming restriction	205
		P-TMSI Signature mismatch	206
		GPRS connection suspended	207
		Authentication failure	208
		User authentication failed	209
		Context not found	210
		All dynamic PDP addresses are occupied	211
		No memory is available	212
		Relocation failure	213
		Unknown mandatory extension header	214
		Semantic error in the TFT operation	215
		Syntactic error in the TFT operation	216
		Semantic errors in packet filter(s)	217
		Syntactic errors in packet filter(s)	218
		Missing or unknown APN	219
		Unknown PDP address or PDP type	220
		PDP context without TFT already activated	221
		For future use	222-240
		Cause values reserved for GPRS charging protocol use (see GTP' in GSM 12.15)	241-255

NOTE: With this coding, bits 8 and 7 of the Cause Value respectively indicate whether the message was a request or a response, and whether the request was accepted or rejected.

Table 39: Use of the Cause Values

Cause 8	value bits 7	Result
0	0	Request
0	1	For future use (Note)
1	0	Acceptance
1	1	Rejection

NOTE: The value '01' is for future use and shall not be sent. If received in a response, it shall be treated as a rejection.

3GPP TSG CN WG4 Meeting #18 Dublin, EIRE, 10th – 14th February 2003

CHANGE REQUEST								CR-Form-v7		
*	29.0	<mark>60</mark> CF	R 385	жr	ev	1 #	Current v	ersion:	4.6.0	¥
For <u>HELP</u> on	using th	is form, s	ee bottom o	of this pag	ge or lo	ok at tl	he pop-up t	ext ove	er the % syr	mbols.
Proposed change	e affects	: UICC	appsℋ <mark></mark>	M	IE <mark> </mark>	Radio <i>I</i>	Access Net	work	Core Ne	etwork X
Title:	∺ Reins	statemen	t of cause o	code versi	on not	suppo	rted			
Source:	₩ CN4									
Work item code:	₩ GTP	enhance	ments				Date	光 14	4/02/2003	
Category:	F A B C D Detaile	(correction (corresponding) (addition (functional (editorial) d explana	ollowing cate in) onds to a cor of feature), al modification modifications of the a TR 21.900	rrection in a on of featur) above cate	re)		2	of the (GS) (Re	el-4 following rele SM Phase 2) lease 1996) lease 1998) lease 1999) lease 4) lease 5) lease 6)	eases:
Reason for chang	70. H	Reinstate	ement of ca	use code	version	not si	unnorted	,	,	
Summary of char	nge: ೫	Cause counused in codes within this adding a	ode 198 had n 29.060. Lu ch 29.060 a s spec. this	d been de ucent hav nd cause CR addre ment that	leted from the realization of th	om 29 ed late 98 ("ve nis issu	.060 followi ely that GTF ersion not s ue by reinst des are sha	e' (32.2 upporte ating th	215) shares ed") is still u nis cause c	cause used
Consequences if not approved:	*	There is I	no way to u	se cause	code 1	98 in 3	32.215			
Clauses affected:	: ¥	7.7.1								
Other specs affected:	æ T	X Tes	er core spe st specificat M Specifica	tions	s a	€				
Other comments:	: Ж									

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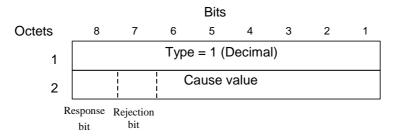


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		CHAN	GE REQ	UEST	-		CR-Form-v7
æ	29.060	CR 386	жrev	1 **	Current version	on: 5.4.0	Ħ
For <u>HELP</u> on t	using this fo	rm, see bottom o	f this page or	look at th	e pop-up text c	over the 光 syr	nbols.
Proposed change	affects:	UICC apps業 <mark> </mark>	ME	Radio A	ccess Network	Core Ne	etwork X
Title: ਮ	Reinstate	ement of cause c	ode version no	ot suppor	ted		
Source:	CN4						
Work item code: भ	GTP enh	ancements			Date: ₩	14/02/2003	
Reason for chang Summary of chang	F (con A (con B (add C (fur D (edd) Detailed ex be found in e: # Reir ge: # Cau unus code with	the following categorection) rresponds to a correlation of feature), actional modification itorial modification planations of the a 3GPP TR 21.900. Instatement of cause code 198 had seed in 29.060. Lues with 29.060 are in this spec, this ing a clear statement of a clear statement	rection in an ear n of feature) bove categories use code versi been deleted icent have rea nd cause code CR addresses	on not su from 29. lized late 198 ("ve	Use one of the 2 (content of t	2.215) shares orted") is still u g this cause c	nade it cause used
Consequences if not approved:		re is no way to us	se cause code	198 in 3	2.215		
Other specs affected: Other specs affected: Other comments:	第 7.7.第 XXXX	Other core spe Test specificati	ons	*			

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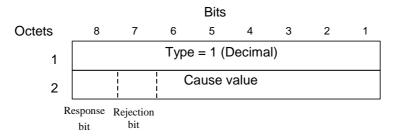


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