Agenda Item: 5.2.3

Source: T2

Title: "Terminal Interfaces and Capabilities" Change Requests

Document for: Approval

Spec	CR	Rev	Rel	Subject	Cat	Vers- Curr	Vers- New	T2 Tdoc	Workitem
27.007	061		rel-4	Aligning command AT+CSNS with changes introduced to single numbering scheme	A	4.1.0	4.2.0	T2-010414	TEI4
27.007	062		R99	Aligning command AT+CSNS with changes introduced to single numbering scheme	F	3.8.0	3.9.0	T2-010415	TEI
27.007	063		R99	Inclusion of multimedia values to command AT+CBST	F	3.8.0	3.9.0	T2-010420	TEI
27.007	064		rel-4	Inclusion of multimedia values to command AT+CBST	Α	4.1.0	4.2.0	T2-010421	TEI4
27.007	065		R99	Modification to Request Packet Domain service 'D' command	F	3.8.0	3.9.0	T2-010422	TEI
27.007	066		rel-4	Modification to Request Packet Domain service 'D' command	Α	4.1.0	4.2.0	T2-010423	TEI4
27.007	067		R99	Inclusion of IPv6 and removal of X.25 and OSPIH <pdp_type> values</pdp_type>	F	3.8.0	3.9.0	T2-010430	TEI
27.007	068		rel-4	Inclusion of IPv6 and removal of X.25 and OSPIH <pdp_type> values</pdp_type>	Α	4.1.0	4.2.0	T2-010431	TEI4

14-10 May 2001							D.E. 0
	CHANGE REQUEST						
*	27.007	CR <mark>061</mark>	₩ re	ev _ #	Current vers	4.1.0	¥
For <u>HELP</u> on u	sing this fo	rm, see bottom	of this page	or look at	the pop-up text	t over the % symb	bols.
Proposed change	affects: #	(U)SIM	ME/UE	Radio	Access Networ	k Core Netv	work
Title: #	Aligning	command AT+0	CSNS with c	hanges int	roduced to sing	<mark>le numbering sch</mark>	neme
Source: #	T2						
Work item code: ₩	TEI4				Date: ₩	Apr 23, 2001	
Category: Ж	Α				Release: #	REL-4	
	F (ess A (co B (Aa C (Fu D (Ea Detailed ex	the following cates ential correction, responds to a coldition of feature), nctional modification planations of the 3GPP TR 21.900	orrection in an tion of feature n) above catego)	2	f the following release (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	ses.
Reason for change	mes The not a	sage which doe refore the rules	es not includ on how to p ngle Numbe	e a BCIE h roceed in d	nave been remo cases where the	response to a ca oved from 27.001, e AT+CBST settir d from the descrip	ng is
Summary of chang	ye: ঋ <mark>See</mark>	'Reason for ch	ange'.				
Consequences if not approved:		ommand +CSN me specification		orrespond	to the existing	Single Numbering	g
Clauses affected:	*						
Other specs affected:	Т	other core speci est specification &M Specification	าร	*			
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 \$\mathbb{X}\$ 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.

1.16.19 Single numbering scheme +CSNS

Table 1: +CSNS parameter command syntax

Command	Possible response(s)
+CSNS=[<mode>]</mode>	
+CSNS?	+CSNS: <mode></mode>
+CSNS=?	+CSNS: (list of supported <mode>s)</mode>

Description

Set command selects the bearer or teleservice to be used when mobile terminated single numbering scheme call is established. Parameter values set with +CBST command shall be used when <mode> equals to a data service. If +CBST parameter is set to a value that is not applicable to single numbering calls, ME/TA shall map the value to the elosest valid one. E.g. if user has set cpeed>=71, <name>=2 and <ce>=1 (non transparent asynchronous 9600 bps V.110 ISDN connection) for mobile originated calls, ME/TA shall map the values into non transparent asynchronous 9600 bps V.32 modem connection when single numbering scheme call is answered.

Test command returns values supported by the TA as compound values.

Defined values

<mode>:

- 0 voice
- 1 alternating voice/fax, voice first (TS 61)
- 2 fax (TS 62)
- 3 alternating voice/data, voice first (BS 61)
- 4 data
- 5 alternating voice/fax, fax first (TS 61)
- 6 alternating voice/data, data first (BS 61)
- 7 voice followed by data (BS 81)

Implementation

Optional.

								CR-Form-v3
		CHAN	NGE RE	QUE	ST			
ж	27.007	CR <mark>062</mark>	₩ re	ev _	ж С	urrent vers	ion: 3.8.	0 #
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Proposed change	affects: भ	(U)SIM	ME/UE)	(Radi	io Acce	ss Network	Core	Network
Title:	Aligning	command AT+0	CSNS with c	<mark>hanges i</mark>	introduc	ed to singl	l <mark>e numberin</mark> ç	gscheme
Source: #	T2							
Work item code: #	TEI					Date: ♯	Apr 23, 20	01
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Reason for change	mes The not	trictions on the sage which doe refore the rules applicable to Sinmand AT+CSN	es not includ on how to p ngle Numbe	e a BCIE roceed ii	E have b n cases	peen remo where the	ved from 27 AT+CBST	.001. setting is
Summary of chang	ge: Ж See	'Reason for ch	ange'.					
Consequences if not approved:		ommand +CSN me specification		orrespor	nd to the	e existing S	Single Numb	pering
Clauses affected:	ж							
Other specs affected:	ж <mark> </mark>	Other core specification Other core specification Other core specification	ns	*				
Other comments:	\varkappa							

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1.16.19 Single numbering scheme +CSNS

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+CSNS=?	+CSNS: (list of supported <mode>s)</mode>

Description

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- 4 data
- 5 alternating voice/fax, fax first (TS 61)
- 6 alternating voice/data, data first (BS 61)
- 7 voice followed by data (BS 81)

Implementation

Optional.

Tdoc T2-010420

			CH	ANGE	REC	QUE	ST				CR-Form-v3
*	27	.007	CR 063	3	₩ rev	-	¥	Current ver	sion:	3.8.0	ж
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Proposed change	affec	ts: #	(U)SIM	ME	/UE X	Rad	lio Ac	cess Netwo	rk	Core N	etwork
Title:	Inc	usion	of multimed	dia values	to comi	mand /	AT+C	CBST			
Source: #	T2										
Work item code: ₩	TE							Date: ೫	8 Ma	r 29, 200	1
Category: ж	F							Release: #	R99	9	
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Reason for change	a. 90	CNIS	proposed t	o roctruct	uro tho	TC 22	002	and to corre	et and	adapt it t	o LIMTS
Summary of change		capa 22.00 and 0 howe	bilities to a 02, BS 30 7 64.0 kbit/s tever, been a uded 28.8,	void incor Franspare for multim added to t 32.0, 33.0	nsistenci nt for M edia bea the <spe< th=""><th>es with ultimed arers. eed> p</th><th>h 27. dia ha Thes aram</th><th>onl, 23.910 ave defined are multimedia neter values on the color.</th><th>and 2 28.8, 3 beard for cor</th><th>9.007. In 32.0, 33.6 ers have mmand A</th><th>TS 5, 56.0, not,</th></spe<>	es with ultimed arers. eed> p	h 27. dia ha Thes aram	onl, 23.910 ave defined are multimedia neter values on the color.	and 2 28.8, 3 beard for cor	9.007. In 32.0, 33.6 ers have mmand A	TS 5, 56.0, not,
		comi	mand AT+C	CBST.							
Consequences if not approved:	ж	There	is no suita	ble AT-co	mmand	for se	lectin	g multimedia	a bear	ers.	
Clauses affected:	ж	6.7									
Other specs affected:	ж	Te	ther core sp est specifica &M Specific	ations	ns S	H					
Other comments:	\mathfrak{H}										

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3)	With "track changes" of just in front of the clau which are not relevant	disabled, paste the e use containing the firs t to the change reque	ntire CR form (use CTRI st piece of changed text. est.	A to select it) into the spec Delete those parts of the sp	ification pecification

6.7 Select bearer service type +CBST

Table 1: +CBST parameter command syntax

Command	Possible response(s)
+CBST=[<speed>[,<name>[,<ce>]]]</ce></name></speed>	
+CBST?	+CBST: <speed>,<name>,<ce></ce></name></speed>
	+CBST: (list of supported <speed>s), (list of supported <name>s), (list of supported <ce>s)</ce></name></speed>

Description

Set command selects the bearer service <name> with data rate <speed>, and the connection element <ce> to be used when data calls are originated (refer 3GPP TS 22.002 [1]). Values may also be used during mobile terminated data call setup, especially in case of single numbering scheme calls (refer +CSNS).

Test command returns values supported by the TA as compound values.

Defined values

NOTE: The default values of the subparameters are manufacturer specific since they depend on the purpose of the device and data services provided by it. Not all combinations of these subparameters are supported by GSM/UMTS (refer 3GPP TS 22.002 [1]).

<speed>:

Эрос	
0	autobauding (automatic selection of the speed; this setting is possible in case of 3.1 kHz modem and non-transparent service)
1	300 bps (V.21)
2	1200 bps (V.22)
3	1200/75 bps (V.23)
4	2400 bps (V.22bis)
5	2400 bps (V.26ter)
6	4800 bps (V.32)
7	9600 bps (V.32)
12	9600 bps (V.34)
14	14400 bps (V.34)
15	19200 bps (V.34)
16	28800 bps (V.34)
17	33600 bps (V.34)
34	1200 bps (V.120)
36	2400 bps (V.120)
38	4800 bps (V.120)
39	9600 bps (V.120)
43	14400 bps (V.120)
47	19200 bps (V.120)
48	28800 bps (V.120)
49	38400 bps (V.120)
50	48000 bps (V.120)
51	56000 bps (V.120)
65	300 bps (V.110)
66	1200 bps (V.110)
68	2400 bps (V.110 or X.31 flag stuffing)
70	4800 bps (V.110 or X.31 flag stuffing)
71	9600 bps (V.110 or X.31 flag stuffing)
75	14400 bps (V.110 or X.31 flag stuffing)
79	19200 bps (V.110 or X.31 flag stuffing)

80	28800 bps (V.110 or X.31 flag stuffing)
81	38400 bps (V.110 or X.31 flag stuffing)
82	48000 bps (V.110 or X.31 flag stuffing)
83	56000 bps (V.110 or X.31 flag stuffing; this setting can be used in conjunction with asynchronous non-transparent UDI or RDI service in order to get FTM)
84	64000 bps (X.31 flag stuffing; this setting can be used in conjunction with asynchronous non-
	transparent UDI service in order to get FTM)
115	56000 bps (bit transparent)
116	64000 bps (bit transparent)
120	32000 bps (PIAFS32k)
121	64000 bps (PIAFS64k)
130	28800 bps (multimedia)
131	32000 bps (multimedia)
132	33600 bps (multimedia)
133	56000 bpsb (multimedia)
<u>134</u>	64000 bps (multimedia)

also all other values below 128 are reserved by the present document.

<name>:

0	data circuit asynchronous (UDI or 3.1 kHz modem)
1	data circuit synchronous (UDI or 3.1 kHz modem)
2	PAD Access (asynchronous) (UDI)
3	Packet Access (synchronous) (UDI)
4	data circuit asynchronous (RDI)
5	data circuit synchronous (RDI)
6	PAD Access (asynchronous) (RDI)
7	Packet Access (synchronous) (RDI)

also all other values below 128 are reserved by the present document.

<ce>:

0	transparent
1	non-transparent

both, transparent preferred both, non-transparent preferred

Implementation

Mandatory when data calls implemented.

			C	AHC	NGE	RI	EQ	UE	ST	•				C	CR-Form-v3
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For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the % symbols.															
Proposed change affects: 第 (U)SIM ME/UE X Radio Access Network Core Network															
Title: ж	Inc	lusion	of mult	imedia v	values	to co	omm	and /	AT+C	CBST					
Source: #	T2														
Work item code: 第	TEI	l4								D	ate: #	Ma	r 29, 2	001	
Category: ж	Α									Relea	ase: #	RE	L-4		
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 R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)									ases:						
Dance for about	- 00	ONIO					T	0.00	000					:4 4 -	LIMITO
Reason for change	Reason for change: CN3 proposed to restructure the TS 22.002 and to correct and adapt it to UM capabilities to avoid inconsistencies with 27.001, 23.910 and 29.007. In TS 22.002, BS 30 Transparent for Multimedia have defined 28.8, 32.0, 33.6, 56.0 and 64.0 kbit/s for multimedia bearers. These multimedia bearers have not, however, been added to the <speed> parameter values for command AT+CB</speed>									S 56.0, ot,					
Summary of chang	je: ૠ		ded 28 CBST.	3.8, 32.0	, 33.6,	56.0), an	d 64.	0 kbi	t/s mu	ltimedi	a bea	rers fo	r con	nmand
Consequences if not approved:	ж	There	is no s	suitable	AT-co	mma	and fo	or sel	lectin	ıg mult	imedia	a bear	ers.		
Clauses affected:	H	6.7													
Other specs affected:	*	Te	est spe	re speci cification ecification	ns	ns	¥								
Other comments:	92														

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3)	With "track changes" of just in front of the clau which are not relevant	disabled, paste the e use containing the firs t to the change reque	ntire CR form (use CTRI st piece of changed text. est.	A to select it) into the spec Delete those parts of the sp	ification pecification

6.7 Select bearer service type +CBST

Table 1: +CBST parameter command syntax

Command	Possible response(s)
+CBST=[<speed>[,<name>[,<ce>]]]</ce></name></speed>	
+CBST?	+CBST: <speed>,<name>,<ce></ce></name></speed>
	+CBST: (list of supported <speed>s), (list of supported <name>s), (list of supported <ce>s)</ce></name></speed>

Description

Set command selects the bearer service <name> with data rate <speed>, and the connection element <ce> to be used when data calls are originated (refer 3GPP TS 22.002 [1]). Values may also be used during mobile terminated data call setup, especially in case of single numbering scheme calls (refer +CSNS).

Test command returns values supported by the TA as compound values.

Defined values

NOTE: The default values of the subparameters are manufacturer specific since they depend on the purpose of the device and data services provided by it. Not all combinations of these subparameters are supported by GSM/UMTS (refer 3GPP TS 22.002 [1]).

<speed>:

Эрос	
0	autobauding (automatic selection of the speed; this setting is possible in case of 3.1 kHz modem and non-transparent service)
1	300 bps (V.21)
2	1200 bps (V.22)
3	1200/75 bps (V.23)
4	2400 bps (V.22bis)
5	2400 bps (V.26ter)
6	4800 bps (V.32)
7	9600 bps (V.32)
12	9600 bps (V.34)
14	14400 bps (V.34)
15	19200 bps (V.34)
16	28800 bps (V.34)
17	33600 bps (V.34)
34	1200 bps (V.120)
36	2400 bps (V.120)
38	4800 bps (V.120)
39	9600 bps (V.120)
43	14400 bps (V.120)
47	19200 bps (V.120)
48	28800 bps (V.120)
49	38400 bps (V.120)
50	48000 bps (V.120)
51	56000 bps (V.120)
65	300 bps (V.110)
66	1200 bps (V.110)
68	2400 bps (V.110 or X.31 flag stuffing)
70	4800 bps (V.110 or X.31 flag stuffing)
71	9600 bps (V.110 or X.31 flag stuffing)
75	14400 bps (V.110 or X.31 flag stuffing)
79	19200 bps (V.110 or X.31 flag stuffing)

80	28800 bps (V.110 or X.31 flag stuffing)
81	38400 bps (V.110 or X.31 flag stuffing)
82	48000 bps (V.110 or X.31 flag stuffing)
83	56000 bps (V.110 or X.31 flag stuffing; this setting can be used in conjunction with asynchronous non-transparent UDI or RDI service in order to get FTM)
84	64000 bps (X.31 flag stuffing; this setting can be used in conjunction with asynchronous non-
	transparent UDI service in order to get FTM)
115	56000 bps (bit transparent)
116	64000 bps (bit transparent)
120	32000 bps (PIAFS32k)
121	64000 bps (PIAFS64k)
130	28800 bps (multimedia)
131	32000 bps (multimedia)
132	33600 bps (multimedia)
133	56000 bpsb (multimedia)
<u>134</u>	64000 bps (multimedia)

also all other values below 128 are reserved by the present document.

<name>:

0	data circuit asynchronous (UDI or 3.1 kHz modem)
1	data circuit synchronous (UDI or 3.1 kHz modem)
2	PAD Access (asynchronous) (UDI)
3	Packet Access (synchronous) (UDI)
4	data circuit asynchronous (RDI)
5	data circuit synchronous (RDI)
6	PAD Access (asynchronous) (RDI)
7	Packet Access (synchronous) (RDI)

also all other values below 128 are reserved by the present document.

<ce>:

0	transparent
1	non-transparent

both, transparent preferred both, non-transparent preferred

Implementation

Mandatory when data calls implemented.

3GPP TSG-T2 #13 Pusan, Korea 14-18 May 2001 Tdoc T2-010422

															CR-Form-v3
			(CHA	NGE	RE	Ql	JES	ST						
ж	27.	007	CR	065		₩ re	ev	-	¥	Current	versi	ion:	3.8	3.0	#
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the % symbols.															
Proposed change affects: # (U)SIM ME/UE X Radio Access Network Core Network															
Title:	€ Mod	dificati	on to F	Request	Packe	t Dom	ain s	servic	ce 'D)' comma	and				
Source:	€ T2														
Work item code: ₩	€ TEI									Date	e: Ж				
Category:	€ F									Release	e: Ж	R99	9		
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) C (Functions of the above categories can REL-4 (Release 4) be found in 3GPP TR 21.900.									ases.						
Reason for change	и е : Ж		ment v		7.007 to	o allov	v mul	litple	con	text in pa	acket	data	call	setur	e.g.
Summary of chan	ge: Ж		ed <cii set-up.</cii 	O> to en	able D	comr	nand	l to a	ctiva	ate multip	ole co	ontex	ts in	pack	et data
Consequences if not approved:	ж	'D' c	ommar	nd will be	e incor	sister	nt wit	h +C	GD/	ATA com	man	d wit	hn 27	7.007	
Clauses affected:	ж	10.2.1	.1, 10.	2.1.2											
Other specs affected:	*	Te	est spe	re speci cification ecification	ns	าร	¥								
Other comments:	¥	CR a	pplies	to Requ	iest Pa	cket [Doma	ain IF	ser	rvice 'D'	<u>com</u> n	<u>nan</u> d	, also)	

10.2.1.1 Request Packet Domain service 'D'

Table 1: D command syntax

Command	Possible Response(s)
<pre>D*<gprs_sc>[*[<called_address>] [*[<l2p>][*[<cid>[,<cid>[,]]]]]]#</cid></cid></l2p></called_address></gprs_sc></pre>	CONNECT ERROR

Description

This command causes the MT to perform whatever actions are necessary to establish communication between the TE and the external PDN.

The V.25ter 'D' (Dial) command causes the MT to enter the V.25ter online data state and, with the TE, to start the specified layer 2 protocol. The MT shall return CONNECT to confirm acceptance of the command prior to entering the V.25ter online data state. No further commands may follow on the AT command line.

The detailed behaviour after the online data state has been entered is dependent on the PDP type. It is described briefly in clauses 8 (for X.25) and 9 (for IP) of 3GPP TS 27.060[34]. PS attachment and PDP context activation procedures may take place prior to or during the PDP startup if they have not already been performed using the +CGATT and +CGACT commands.

When the layer 2 protocol has terminated, either as a result of an orderly shut down of the PDP or an error, the MT shall enter V.25ter command state and return the NO CARRIER final result code.

If <called address> is supported and provided, the MT shall automatically set up a virtual call to the specified address after the PDP context has been activated.

If <L2P> and <cid> are supported, their usage shall be the same as in the +CGDATA command. The +CGDCONT, +CGQREQ, etc. commands may be used in the modem initialization AT command string to set values for for PDP type, APN, QoS etc..

If <L2P> is not supported or is supported but omitted, the MT shall use a layer 2 protocol appropriate to the PDP type.

If <cid> is not supported or is supported but omitted, the MT shall attempt to activate the context using:

- (a) any information provided by the TE during the PDP startup procedure, e.g. the TE may provide a PDP type and/or PDP address to the MT.
- or, (b) a priori knowledge, e.g. the MT may implement only one PDP type,
- or, (c) using the 'Empty PDP type' (GSM 04.08). (No PDP address or APN shall be sent in this case and only one PDP context subscription record shall be present in the HLR for this subscriber.)

This command may be used in both normal and modem compatibility modes.

NOTE: The dial string conforms to the syntax specified in 3GPP TS 22.030 [19].

Defined Values

- <GPRS_SC>: (GPRS Service Code) a digit string (value 99) which identifies a request to use the Packet Domain service
- <called_address>: a string that identifies the called party in the address space applicable to the PDP. For communications software that does not support arbitrary characters in the dial string, a numeric equivalent may be used. Also, the character comma ',' may be used as a substitute for the character period '.'.

For PDP type OSP:IHOSS, the following syntax may be used for <called_address>:

 $[<\!host>][@[<\!port>][@[<\!protocol>]]]$

where <host>, <port> and <protocol> are defined in the +CGDCONT description. For communications software that does not support arbitrary characters in the dial string, a numeric equivalent to the hostname may be used. However, this should be avoided if at all possible.

<L2P>: a string which indicates the layer 2 protocol to be used (see +CGDATA command). For communications software that does not support arbitrary characters in the dial string, the following numeric equivalents shall be used:

0 NULL
1 PPP
2 PAD
3 X25
9yyyy M-xxxx

Other values are reserved and will result in an ERROR response

<cid>: a digit string which specifies a particular PDP context definition (see the +CGDCONT and +CGDSCONT commands).

Implementation

Optional if the +CGDATA command is supported. If the D command is provided, then support for <called_address>, <L2P> and <cid> are optional. If they are not supported but values are provided by the TE, the values shall be ignored and this shall not constitute an error.

10.2.1.2 Request Packet Domain IP service 'D'

Table 2: D command syntax

Command	Possible Response(s)
D* <gprs_sc_ip>[*<cid>[,<cid>[,]]]#</cid></cid></gprs_sc_ip>	CONNECT ERROR

Description

This command causes the MT to perform whatever actions are necessary to establish communication between the TE and the external PDN.

The V.25ter 'D' (Dial) command causes the MT to enter the V.25ter online data state and, with the TE, to start the specified layer 2 protocol. The MT shall return CONNECT to confirm acceptance of the command prior to entering the V.25ter online data state. No further commands may follow on the AT command line.

The detailed behaviour after the online data state has been entered is described briefly in clause 9, for IP, of 3GPP TS 27.060[34]. GPRS attachment and PDP context activation procedures may take place prior to or during the PDP startup if they have not already been performed using the +CGATT and +CGACT commands.

When the layer 2 protocol has terminated, either as a result of an orderly shut down of the PDP or an error, the MT shall enter V.25ter command state and return the NO CARRIER final result code.

If <cid> is supported, its usage shall be the same as in the +CGDATA command. The +CGDCONT, +CGQREQ, etc. commands may be used in the modem initialization AT command string to set values for for PDP type, APN, QoS etc.

If <cid> is not supported or is supported but omitted, the MT shall attempt to activate the context using:

- (a) any information provided by the TE during the PDP startup procedure, e.g. the TE may provide a PDP type and/or PDP address to the MT,
- or, (b) a priori knowledge, e.g. the MT may implement only one PDP type,
- or, (c) using the 'Empty PDP type' (GSM 04.08). (No PDP address or APN shall be sent in this case and only one PDP context subscription record shall be present in the HLR for this subscriber.)

This command may be used in both normal and modem compatibility modes.

NOTE. The dial string conforms to the syntax specified in 3GPP TS 22.030[19].

Defined Values

<GPRS_SC_IP>: (GPRS Service Code for IP) a digit string (value 98) which identifies a request to use the GPRS with IP (PDP types IP and PPP)

<cid>: a digit string which specifies a particular PDP context definition (see +CGDCONT command).

Implementation

Optional if the +CGDATA command is supported. If the D command is provided, then support for <cid> is optional. If it is not supported but a value is provided by the TE, the value shall be ignored and this shall not constitute an error.

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			(CHAN	NGE	R	ΕQ	UE	ST					CR-Form-v3
ж	27.	007	CR	066		Ж 1	rev	-	Ж	Curre	nt vers	sion:	4.1.0	ж
For <u>HELP</u> on us	For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the % symbols.													
Proposed change affects: # (U)SIM ME/UE X Radio Access Network Core Network														
Title: 第	Mod	lificati	on to F	Request	Packe	t Dor	main	serv	ice 'I	D' comr	mand			
Source: #	T2													
Work item code: ₩	TEI	1								Da	ate: ೫			
Category: Ж	Α									Relea	rse: ೫	RE	L-4	
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:	<i>:</i> Ж		ment v		7.007 to	o allo	w m	ulitpl	e cor	ntext in	packe	t data	a call setu	p e.g.
Summary of change	Added <cid> to enable D command to activate multiple contexts in packet data call set-up.</cid>													
Consequences if not approved:	#	'D' c	ommai	nd will be	e incor	nsiste	ent w	/ith +	CGD	ATA co	mmar	nd wit	hn 27.00	7.
Clauses affected:	ж	10.2	.1.1, 10	0.2.1.2										
Other specs affected:	*	O T(ther co	ore speci ecification ecification	ns	ns	æ							
Other comments:	\mathbf{x}	CR a	applies	to Requ	iest Pa	acket	Don	nain l	IP se	rvice 'E	o' com	<u>man</u> c	l, also	

10.2.1.1 Request Packet Domain service 'D'

Table 1: D command syntax

Command	Possible Response(s)
<pre>D*<gprs_sc>[*[<called_address>] [*[<l2p>][*[<cid>[,<cid>[,]]]]]]#</cid></cid></l2p></called_address></gprs_sc></pre>	CONNECT ERROR

Description

This command causes the MT to perform whatever actions are necessary to establish communication between the TE and the external PDN.

The V.25ter 'D' (Dial) command causes the MT to enter the V.25ter online data state and, with the TE, to start the specified layer 2 protocol. The MT shall return CONNECT to confirm acceptance of the command prior to entering the V.25ter online data state. No further commands may follow on the AT command line.

The detailed behaviour after the online data state has been entered is dependent on the PDP type. It is described briefly in clauses 8 (for X.25) and 9 (for IP) of 3GPP TS 27.060[34]. PS attachment and PDP context activation procedures may take place prior to or during the PDP startup if they have not already been performed using the +CGATT and +CGACT commands.

When the layer 2 protocol has terminated, either as a result of an orderly shut down of the PDP or an error, the MT shall enter V.25ter command state and return the NO CARRIER final result code.

If <called address> is supported and provided, the MT shall automatically set up a virtual call to the specified address after the PDP context has been activated.

If <L2P> and <cid> are supported, their usage shall be the same as in the +CGDATA command. The +CGDCONT, +CGQREQ, etc. commands may be used in the modem initialization AT command string to set values for for PDP type, APN, QoS etc..

If <L2P> is not supported or is supported but omitted, the MT shall use a layer 2 protocol appropriate to the PDP type.

If <cid> is not supported or is supported but omitted, the MT shall attempt to activate the context using:

- (a) any information provided by the TE during the PDP startup procedure, e.g. the TE may provide a PDP type and/or PDP address to the MT.
- or, (b) a priori knowledge, e.g. the MT may implement only one PDP type,
- or, (c) using the 'Empty PDP type' (TS 24.008). (No PDP address or APN shall be sent in this case and only one PDP context subscription record shall be present in the HLR for this subscriber.)

This command may be used in both normal and modem compatibility modes.

NOTE: The dial string conforms to the syntax specified in 3GPP TS 22.030 [19].

Defined Values

- <GPRS_SC>: (GPRS Service Code) a digit string (value 99) which identifies a request to use the Packet Domain service
- <called_address>: a string that identifies the called party in the address space applicable to the PDP. For communications software that does not support arbitrary characters in the dial string, a numeric equivalent may be used. Also, the character comma ',' may be used as a substitute for the character period '.'.

For PDP type OSP:IHOSS, the following syntax may be used for <called_address>:

 $[<\!host>][@[<\!port>][@[<\!protocol>]]]$

where <host>, <port> and <protocol> are defined in the +CGDCONT description. For communications software that does not support arbitrary characters in the dial string, a numeric equivalent to the hostname may be used. However, this should be avoided if at all possible.

<L2P>: a string which indicates the layer 2 protocol to be used (see +CGDATA command). For communications software that does not support arbitrary characters in the dial string, the following numeric equivalents shall be used:

0 NULL
1 PPP
2 PAD
3 X25
9yyyy M-xxxx

Other values are reserved and will result in an ERROR response

<cid>: a digit string which specifies a particular PDP context definition (see the +CGDCONT and +CGDSCONT commands).

Implementation

Optional if the +CGDATA command is supported. If the D command is provided, then support for <called_address>, <L2P> and <cid> are optional. If they are not supported but values are provided by the TE, the values shall be ignored and this shall not constitute an error.

10.2.1.2 Request Packet Domain IP service 'D'

Table 2: D command syntax

Command	Possible Response(s)
D* <gprs_sc_ip>[*<cid>[,<cid>[,]]]#</cid></cid></gprs_sc_ip>	CONNECT ERROR

Description

This command causes the MT to perform whatever actions are necessary to establish communication between the TE and the external PDN.

The V.25ter 'D' (Dial) command causes the MT to enter the V.25ter online data state and, with the TE, to start the specified layer 2 protocol. The MT shall return CONNECT to confirm acceptance of the command prior to entering the V.25ter online data state. No further commands may follow on the AT command line.

The detailed behaviour after the online data state has been entered is described briefly in clause 9, for IP, of 3GPP TS 27.060[34]. GPRS attachment and PDP context activation procedures may take place prior to or during the PDP startup if they have not already been performed using the +CGATT and +CGACT commands.

When the layer 2 protocol has terminated, either as a result of an orderly shut down of the PDP or an error, the MT shall enter V.25ter command state and return the NO CARRIER final result code.

If <cid> is supported, its usage shall be the same as in the +CGDATA command. The +CGDCONT, +CGQREQ, etc. commands may be used in the modem initialization AT command string to set values for for PDP type, APN, QoS etc.

If <cid> is not supported or is supported but omitted, the MT shall attempt to activate the context using:

- (a) any information provided by the TE during the PDP startup procedure, e.g. the TE may provide a PDP type and/or PDP address to the MT,
- or, (b) a priori knowledge, e.g. the MT may implement only one PDP type,
- or, (c) using the 'Empty PDP type' (TS 24.008). (No PDP address or APN shall be sent in this case and only one PDP context subscription record shall be present in the HLR for this subscriber.)

This command may be used in both normal and modem compatibility modes.

NOTE. The dial string conforms to the syntax specified in 3GPP TS 22.030[19].

Defined Values

<GPRS_SC_IP>: (GPRS Service Code for IP) a digit string (value 98) which identifies a request to use the GPRS with IP (PDP types IP and PPP)

<cid>: a digit string which specifies a particular PDP context definition (see +CGDCONT command).

Implementation

Optional if the +CGDATA command is supported. If the D command is provided, then support for <cid> is optional. If it is not supported but a value is provided by the TE, the value shall be ignored and this shall not constitute an error.

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CHANGE REQUEST							
¥ 2	<mark>27.007</mark>	CR <mark>067</mark>	₩ re	#V _ #	Current vers	3.8.0 [#]	
For <u>HELP</u> on usi	ing this fo	rm, see bottom	of this page	or look at	the pop-up text	over the 光 symbols.	
Proposed change af	fects: #	(U)SIM	ME/UE 🔀	Radio	Access Network	Core Network	<
Title: 第	Inclusion	of IPv6 and rem	noval of X.2	and OSP	IH <pdp_type></pdp_type>	values	
Source: #	T2						
Work item code: 第	TEI				Date: ₩		
Category: 第	F				Release: ♯	REL-99	
	F (ess A (cor B (Add C (Full D (Edi Detailed ex	the following cate ential correction) responds to a codition of feature), nctional modificational modificational anations of the 3GPP TR 21.900	rrection in antion of featurent) above catego	·)	2 ase) R96 R97 R98 R99	the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	
Reason for change:	OSP +CG	IH PDP types a	re removed	. The AT c	ommands +CG	for PDP type. X.25 DCONT and igned with the GPRS	
Summary of change.		ed IPv6 and rem mands +CGDC				values in the AT	
Consequences if not approved:	com				en IPv4 and IPv not be aligned w	6 PDP type. The AT rith the GPRS	
Clauses affected:	第 10.1	.1, 10.1.2					
Other specs affected:	Te	ther core specifest specification &M Specification	ıs	*			
Other comments:	ж						

10.1.1 Define PDP Context +CGDCONT

Table 1: +CGDCONT parameter command syntax

Command	Possible response(s)
+CGDCONT=[<cid>[,<pdp_type>[,<apn></apn></pdp_type></cid>	OK
[, <pdp_addr> [,<d_comp> [,<h_comp></h_comp></d_comp></pdp_addr>	ERROR
[, <pd1> [,[,pdN]]]]]]]]</pd1>	
+CGDCONT?	+CGDCONT: <cid>, <pdp_type>,</pdp_type></cid>
	<apn>,<pdp_addr>, <data_comp>,</data_comp></pdp_addr></apn>
	<head_comp>[,<pd1>[,[,pdN]]]</pd1></head_comp>
	[<cr><lf>+CGDCONT: <cid>, <pdp_type>,</pdp_type></cid></lf></cr>
	<apn>,<pdp_addr>, <data_comp>,</data_comp></pdp_addr></apn>
	<head_comp>[,<pd1>[,[,pdN]]]</pd1></head_comp>
	[]]
+CGDCONT=?	+CGDCONT: (range of supported <cid>s),</cid>
	<pdp_type>,,,(list of supported <d_comp>s),</d_comp></pdp_type>
	(list of supported <h_comp>s) [, (list of supported</h_comp>
	<pd1>s)[,[,(list of supported <pdn>s)]]]</pdn></pd1>
	[<cr><lf>+CGDCONT: (range of supported <cid>s),</cid></lf></cr>
	<pdp_type>, , , (list of supported <d_comp>s) ,</d_comp></pdp_type>
	(list of supported <h_comp>s) [, (list of supported</h_comp>
	<pd1>s) [,[,(list of supported <pdn>s)]]]</pdn></pd1>
	[]]

Description

The set command specifies PDP context parameter values for a PDP context identified by the (local) context identification parameter, <cid>. The number of PDP contexts that may be in a defined state at the same time is given by the range returned by the test command.

A special form of the set command, +CGDCONT= <cid> causes the values for context number <cid> to become undefined.

The read command returns the current settings for each defined context.

The test command returns values supported as a compound value. If the MT supports several PDP types, <PDP_type>, the parameter value ranges for each <PDP_type> are returned on a separate line.

Defined values

<cid>: (PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition. The parameter is local to the TE-MT interface and is used in other PDP context-related commands. The range of permitted values (minimum value = 1) is returned by the test form of the command.

<PDP_type>: (Packet Data Protocol type) a string parameter which specifies the type of packet data protocol

X25	— ITU T/CCITT X.25 layer 3
IP	Internet Protocol (IETF STD 5)
IPV6	Internet Protocol, version 6 (IETF RFC 2460)
OSPIH	Internet Hosted Octet Stream Protocol
PPP	Point to Point Protocol (IETF STD 51)

<APN>: (Access Point Name) a string parameter which is a logical name that is used to select the GGSN or the external packet data network.

If the value is null or omitted, then the subscription value will be requested.

<PDP_address>: a string parameter that identifies the MT in the address space applicable to the PDP.

If the value is null or omitted, then a value may be provided by the TE during the PDP startup procedure or, failing that, a dynamic address will be requested.

The read form of the command will continue to return the null string even if an address has been allocated during the PDP startup procedure. The allocated address may be read using the +CGPADDR command.

<d_comp>: a numeric parameter that controls PDP data compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

<h_comp>: a numeric parameter that controls PDP header compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

NOTE: At present only one data compression algorithm (V.42bis) is provided in SNDCP. If and when other algorithms become available, a command will be provided to select one or more of these.

<pd1>, ... <pdN>: zero to N string parameters whose meanings are specific to the <PDP_type>

For PDP type OSP:IHOSS the following parameters are defined:

<pd1> = <host> the fully formed domain name extended hostname of the Internet host

<pd2> = <port > the TCP or UDP port on the Internet host

<pd3> = <protocol> the protocol to be used over IP on the Internet - "TCP" or "UDP

Implementation

Mandatory unless only a single subscribed context is supported.

10.1.2 Define Secondary PDP Context +CGDSCONT

Table 2: +CGDSCONT parameter command syntax

Command	Possible response(s)
+CGDSCONT=[<cid> ,<p_cid> [,<d_comp></d_comp></p_cid></cid>	OK
[, <h_comp>]]]</h_comp>	ERROR
+CGDSCONT?	+CGDSCONT: <cid>, <p_cid>, <data_comp>,</data_comp></p_cid></cid>
	<head_comp></head_comp>
	[<cr><lf>+CGDSCONT: <cid>, <p_cid>,</p_cid></cid></lf></cr>
	<data_comp>, <head_comp></head_comp></data_comp>
	[]]
+CGDSCONT=?	+CGDSCONT: (range of supported <cid>s),</cid>
	(list of <cid>s for active primary</cid>
	contexts), <pdp_type>,,,(list of</pdp_type>
	<pre>supported <d_comp>s),</d_comp></pre>
	(list of supported <h_comp>s)</h_comp>
	[<cr><lf>+CGDCONT: (range of supported</lf></cr>
	<cid>s), (list of <cid>s for active</cid></cid>
	<pre>primary contexts) ,<pdp_type>,,,(list of</pdp_type></pre>
	<pre>supported <d_comp>s),</d_comp></pre>
	(list of supported <h_comp>s)</h_comp>
	[]]

Description

The set command specifies PDP context parameter values for a Secondary PDP context identified by the (local) context identification parameter, <cid>. The number of PDP contexts that may be in a defined state at the same time is given by the range returned by the test command.

A special form of the set command, +CGDSCONT= <cid> causes the values for context number <cid> to become undefined.

The read command returns the current settings for each defined context.

The test command returns values supported as a compound value. If the MT supports several PDP types, <PDP_type>, the parameter value ranges for each <PDP_type> are returned on a separate line.

Defined values

- <cid>: (PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition. The parameter is local to the TE-MT interface and is used in other PDP context-related commands. The range of permitted values (minimum value = 1) is returned by the test form of the command.
- <p_cid>: (Primary PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition which has been specified by use of the +CGDCONT command. The parameter is local to the TE-MT interface. The list of permitted values is returned by the test form of the command.
- <PDP_type>: (Packet Data Protocol type) a string parameter which specifies the type of packet data protocol

X25	<u>ITU T/CCITT X.25 layer 3</u>	
IP	Internet Protocol (IETF STD 5)	
IPV6	Internet Protocol, version 6 (IETF RFC 2460)	
OSPIH	Internet Hosted Octet Stream Protocol	
PPP	Point to Point Protocol (IETF STD 51)	· ·

<d_comp>: a numeric parameter that controls PDP data compression (applicable to GPRS only)

0 - off (default if value is omitted)

1 - on

Other values are reserved.

<h_comp>: a numeric parameter that controls PDP header compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

NOTE. At present only one data compression algorithm (V.42bis) is provided in SNDCP. If and when other algorithms become available, a command will be provided to select one or more of these. (GPRS only)

Implementation

Optional.

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14-10 May 2001	00.5			
CHANGE REQUEST				
*	27.007 CR 068			
For <u>HELP</u> on us	ng this form, see bottom of this page or look at the pop-up text over the 🕱 symbols	S.		
Proposed change af	fects: 第 (U)SIM ME/UE X Radio Access Network Core Network	rk		
Title: 第	Inclusion of IPv6 and removal of X.25 and OSPIH <pdp_type> values</pdp_type>			
Source: 第	Т2			
Work item code: ₩	TEI4 Date: #			
Category: #	Release: # REL-4			
	Ise 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) Petailed explanations of the above categories can e 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)	S:		
Reason for change:	# REL-4 23.060 "GPRS Service Description" includes IPv6 for PDP type. X.25 a OSPIH PDP types are removed. The AT commands +CGDCONT and +CGDSCONT, which define the PDP contexts, shall be aligned with the GPR specification.			
Summary of change	Added IPv6 and removal of X.25 and OSPIH <pdp_type> values in the AT commands +CGDCONT and +CGDSCONT</pdp_type>			
Consequences if not approved:	# There is no clear way to distinguish between IPv4 and IPv6 PDP type. The Accommands for PDP context definition will not be aligned with the GPRS specififcations	Т		
Clauses affected:	% 10.1.1, 10.1.2			
Other specs affected:	# Other core specifications # Test specifications O&M Specifications			
Other comments:	¥			

10.1.1 Define PDP Context +CGDCONT

Table 1: +CGDCONT parameter command syntax

Command	Possible response(s)
+CGDCONT=[<cid>[,<pdp_type>[,<apn></apn></pdp_type></cid>	OK
[, <pdp_addr> [,<d_comp> [,<h_comp></h_comp></d_comp></pdp_addr>	ERROR
[, <pd1> [,[,pdN]]]]]]]]</pd1>	
+CGDCONT?	+CGDCONT: <cid>, <pdp_type>,</pdp_type></cid>
	<apn>,<pdp_addr>, <data_comp>,</data_comp></pdp_addr></apn>
	<head_comp>[,<pd1>[,[,pdN]]]</pd1></head_comp>
	[<cr><lf>+CGDCONT: <cid>, <pdp_type>,</pdp_type></cid></lf></cr>
	<apn>,<pdp_addr>, <data_comp>,</data_comp></pdp_addr></apn>
	<head_comp>[,<pd1>[,[,pdN]]]</pd1></head_comp>
	[]]
+CGDCONT=?	+CGDCONT: (range of supported <cid>s),</cid>
	<pdp_type>,,,(list of supported <d_comp>s),</d_comp></pdp_type>
	(list of supported <h_comp>s) [, (list of supported</h_comp>
	<pd1>s)[,[,(list of supported <pdn>s)]]]</pdn></pd1>
	[<cr><lf>+CGDCONT: (range of supported <cid>s),</cid></lf></cr>
	<pdp_type>, , , (list of supported <d_comp>s) ,</d_comp></pdp_type>
	(list of supported <h_comp>s) [, (list of supported</h_comp>
	<pd1>s) [,[,(list of supported <pdn>s)]]]</pdn></pd1>
	[]]

Description

The set command specifies PDP context parameter values for a PDP context identified by the (local) context identification parameter, <cid>. The number of PDP contexts that may be in a defined state at the same time is given by the range returned by the test command.

A special form of the set command, +CGDCONT= <cid> causes the values for context number <cid> to become undefined.

The read command returns the current settings for each defined context.

The test command returns values supported as a compound value. If the MT supports several PDP types, <PDP_type>, the parameter value ranges for each <PDP_type> are returned on a separate line.

Defined values

<cid>: (PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition. The parameter is local to the TE-MT interface and is used in other PDP context-related commands. The range of permitted values (minimum value = 1) is returned by the test form of the command.

<PDP_type>: (Packet Data Protocol type) a string parameter which specifies the type of packet data protocol

X25	— ITU T/CCITT X.25 layer 3
IP	Internet Protocol (IETF STD 5)
IPV6	Internet Protocol, version 6 (IETF RFC 2460)
OSPIH	Internet Hosted Octet Stream Protocol
PPP	Point to Point Protocol (IETF STD 51)

<APN>: (Access Point Name) a string parameter which is a logical name that is used to select the GGSN or the external packet data network.

If the value is null or omitted, then the subscription value will be requested.

<PDP_address>: a string parameter that identifies the MT in the address space applicable to the PDP.

If the value is null or omitted, then a value may be provided by the TE during the PDP startup procedure or, failing that, a dynamic address will be requested.

The read form of the command will continue to return the null string even if an address has been allocated during the PDP startup procedure. The allocated address may be read using the +CGPADDR command.

<d_comp>: a numeric parameter that controls PDP data compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

<h_comp>: a numeric parameter that controls PDP header compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

NOTE: At present only one data compression algorithm (V.42bis) is provided in SNDCP. If and when other algorithms become available, a command will be provided to select one or more of these.

<pd1>, ... <pdN>: zero to N string parameters whose meanings are specific to the <PDP_type>

For PDP type OSP:IHOSS the following parameters are defined:

<pd1> = <host> the fully formed domain name extended hostname of the Internet host

<pd2> = <port > the TCP or UDP port on the Internet host

<pd3> = <protocol> the protocol to be used over IP on the Internet - "TCP" or "UDP

Implementation

Mandatory unless only a single subscribed context is supported.

10.1.2 Define Secondary PDP Context +CGDSCONT

Table 2: +CGDSCONT parameter command syntax

Command	Possible response(s)
+CGDSCONT=[<cid> ,<p_cid> [,<d_comp></d_comp></p_cid></cid>	OK
[, <h_comp>]]]</h_comp>	ERROR
+CGDSCONT?	+CGDSCONT: <cid>, <p_cid>, <data_comp>,</data_comp></p_cid></cid>
	<head_comp></head_comp>
	[<cr><lf>+CGDSCONT: <cid>, <p_cid>,</p_cid></cid></lf></cr>
	<data_comp>, <head_comp></head_comp></data_comp>
	[]]
+CGDSCONT=?	+CGDSCONT: (range of supported <cid>s),</cid>
	(list of <cid>s for active primary</cid>
	contexts), <pdp_type>,,,(list of</pdp_type>
	<pre>supported <d_comp>s),</d_comp></pre>
	(list of supported <h_comp>s)</h_comp>
	[<cr><lf>+CGDCONT: (range of supported</lf></cr>
	<cid>s), (list of <cid>s for active</cid></cid>
	<pre>primary contexts) ,<pdp_type>,,,(list of</pdp_type></pre>
	<pre>supported <d_comp>s),</d_comp></pre>
	(list of supported <h_comp>s)</h_comp>
	[]]

Description

The set command specifies PDP context parameter values for a Secondary PDP context identified by the (local) context identification parameter, <cid>. The number of PDP contexts that may be in a defined state at the same time is given by the range returned by the test command.

A special form of the set command, +CGDSCONT= <cid> causes the values for context number <cid> to become undefined.

The read command returns the current settings for each defined context.

The test command returns values supported as a compound value. If the MT supports several PDP types, <PDP_type>, the parameter value ranges for each <PDP_type> are returned on a separate line.

Defined values

- <cid>: (PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition. The parameter is local to the TE-MT interface and is used in other PDP context-related commands. The range of permitted values (minimum value = 1) is returned by the test form of the command.
- <p_cid>: (Primary PDP Context Identifier) a numeric parameter which specifies a particular PDP context definition which has been specified by use of the +CGDCONT command. The parameter is local to the TE-MT interface. The list of permitted values is returned by the test form of the command.
- <PDP_type>: (Packet Data Protocol type) a string parameter which specifies the type of packet data protocol

X25	ITU T/CCITT X.25 layer 3	
IP	Internet Protocol (IETF STD 5)	
IPV6	Internet Protocol, version 6 (IETF RFC 2460)	
OSPIH	Internet Hosted Octet Stream Protocol	
PPP	Point to Point Protocol (IETF STD 51)	·

<d_comp>: a numeric parameter that controls PDP data compression (applicable to GPRS only)

0 - off (default if value is omitted)

1 - on

Other values are reserved.

<h_comp>: a numeric parameter that controls PDP header compression

0 - off (default if value is omitted)

1 - on

Other values are reserved.

NOTE. At present only one data compression algorithm (V.42bis) is provided in SNDCP. If and when other algorithms become available, a command will be provided to select one or more of these. (GPRS only)

Implementation

Optional.