

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	A	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	A	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	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	A	4.1.0	4.2.0	T2-010431	TEI4

CHANGE REQUEST

⌘ **27.007 CR 061** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Aligning command AT+CSNS with changes introduced to single numbering scheme		
Source:	⌘ T2		
Work item code:	⌘ TEI4	Date:	⌘ Apr 23, 2001
Category:	⌘ A	Release:	⌘ REL-4
	Use <u>one</u> 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)		Use <u>one</u> 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)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		

Reason for change:	⌘ Restrictions on the call type which an MS can propose in response to a call setup message which does not include a BCIE have been removed from 27.001. Therefore the rules on how to proceed in cases where the AT+CBST setting is not applicable to Single Numbering Scheme are removed from the description of command AT+CSNS.
Summary of change:	⌘ See 'Reason for change'.
Consequences if not approved:	⌘ AT-command +CSNS does not correspond to the existing Single Numbering Scheme specification.

Clauses affected:	⌘		
Other specs affected:	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> 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://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

4.16.19 Single numbering scheme +CSNS

Table 1: +CSNS parameter command syntax

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

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 closest valid one. E.g. if user has set <speed>=71, <name>=2 and <cc>=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.

CHANGE REQUEST

⌘ **27.007 CR 062** ⌘ rev **-** ⌘ Current version: **3.8.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Aligning command AT+CSNS with changes introduced to single numbering scheme		
Source:	⌘ T2		
Work item code:	⌘ TEI	Date:	⌘ Apr 23, 2001
Category:	⌘ F	Release:	⌘ R99
Use <u>one</u> 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)		Use <u>one</u> 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)	
Detailed explanations of the above categories can be found in 3GPP TR 21.900.			

Reason for change:	⌘ Restrictions on the call type which an MS can propose in response to a call setup message which does not include a BCIE have been removed from 27.001. Therefore the rules on how to proceed in cases where the AT+CBST setting is not applicable to Single Numbering Scheme are removed from the description of command AT+CSNS.
Summary of change:	⌘ See 'Reason for change'.
Consequences if not approved:	⌘ AT-command +CSNS does not correspond to the existing Single Numbering Scheme specification.

Clauses affected:	⌘		
Other specs affected:	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	
Other comments:	⌘		

How to create CRs using this form:

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- 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://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

4.16.19 Single numbering scheme +CSNS

Table 1: +CSNS parameter command syntax

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

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 closest valid one. E.g. if user has set <speed>=71, <name>=2 and <cc>=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.

CHANGE REQUEST

⌘ **27.007 CR 063** ⌘ rev **-** ⌘ Current version: **3.8.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Inclusion of multimedia values to command AT+CBST		
Source:	⌘ T2		
Work item code:	⌘ TEI	Date:	⌘ Mar 29, 2001
Category:	⌘ F	Release:	⌘ R99
<i>Use <u>one</u> of the following categories:</i>		<i>Use <u>one</u> of the following releases:</i>	
F (essential correction)		2 (GSM Phase 2)	
A (corresponds to a correction in an earlier release)		R96 (Release 1996)	
B (Addition of feature),		R97 (Release 1997)	
C (Functional modification of feature)		R98 (Release 1998)	
D (Editorial modification)		R99 (Release 1999)	
Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)	
		REL-5 (Release 5)	

Reason for change:	⌘ CN3 proposed to restructure the TS 22.002 and to correct and adapt it to UMTS 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+CBST.
Summary of change:	⌘ Included 28.8, 32.0, 33.6, 56.0, and 64.0 kbit/s multimedia bearers for command AT+CBST.
Consequences if not approved:	⌘ There is no suitable AT-command for selecting multimedia bearers.

Clauses affected:	⌘ 6.7
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘

How to create CRs using this form:

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- 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://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

6.7 Select bearer service type +CBST

Table 1: +CBST parameter command syntax

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

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>:

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)
<u>130</u>	<u>28800 bps (multimedia)</u>
<u>131</u>	<u>32000 bps (multimedia)</u>
<u>132</u>	<u>33600 bps (multimedia)</u>
<u>133</u>	<u>56000 bps (multimedia)</u>
<u>134</u>	<u>64000 bps (multimedia)</u>

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
2	both, transparent preferred
3	both, non-transparent preferred

Implementation

Mandatory when data calls implemented.

CHANGE REQUEST

⌘ **27.007 CR 064** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Inclusion of multimedia values to command AT+CBST		
Source:	⌘ T2		
Work item code:	⌘ TEI4	Date:	⌘ Mar 29, 2001
Category:	⌘ A	Release:	⌘ REL-4
	<i>Use one of the following categories:</i> 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.		<i>Use one of the following releases:</i> 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:	⌘ CN3 proposed to restructure the TS 22.002 and to correct and adapt it to UMTS 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+CBST.
Summary of change:	⌘ Included 28.8, 32.0, 33.6, 56.0, and 64.0 kbit/s multimedia bearers for command AT+CBST.
Consequences if not approved:	⌘ There is no suitable AT-command for selecting multimedia bearers.

Clauses affected:	⌘ 6.7
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘

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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.

6.7 Select bearer service type +CBST

Table 1: +CBST parameter command syntax

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

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>:

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)
<u>130</u>	<u>28800 bps (multimedia)</u>
<u>131</u>	<u>32000 bps (multimedia)</u>
<u>132</u>	<u>33600 bps (multimedia)</u>
<u>133</u>	<u>56000 bps (multimedia)</u>
<u>134</u>	<u>64000 bps (multimedia)</u>

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
2	both, transparent preferred
3	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	CHANGE REQUEST
⌘ 27.007 CR 065 ⌘ rev - ⌘ Current version: 3.8.0 ⌘	

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Modification to Request Packet Domain service 'D' command		
Source:	⌘ T2		
Work item code:	⌘ TEI	Date:	⌘
Category:	⌘ F	Release:	⌘ R99
Use <u>one</u> 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 <u>one</u> 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:	⌘ Alignment within 27.007 to allow multiple context in packet data call setup e.g. with +CGDATA.
Summary of change:	⌘ Added <CID> to enable D command to activate multiple contexts in packet data call set-up.
Consequences if not approved:	⌘ 'D' command will be inconsistent with +CGDATA command within 27.007.

Clauses affected:	⌘ 10.2.1.1, 10.2.1.2		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘ CR applies to Request Packet Domain IP service 'D' command, also		

10.2.1.1 Request Packet Domain service 'D'

Table 1: D command syntax

Command	Possible Response(s)
D*<GPRS_SC>[*[<called_address>] [*[<L2P>][*[<cid>[,<cid>[,...]]]]]]#	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> [, ...]]] #	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.

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

Tdoc T2-010423

CR-Form-v3	CHANGE REQUEST
⌘ 27.007 CR 066 ⌘ rev - ⌘ Current version: 4.1.0 ⌘	

For **HELP** 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 Radio Access Network Core Network

Title:	⌘ Modification to Request Packet Domain service 'D' command		
Source:	⌘ T2		
Work item code:	⌘ TEI4	Date:	⌘
Category:	⌘ A	Release:	⌘ REL-4
Use <u>one</u> 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 <u>one</u> 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:	⌘ Alignment within 27.007 to allow multiple context in packet data call setup e.g. with +CGDATA.
Summary of change:	⌘ Added <CID> to enable D command to activate multiple contexts in packet data call set-up.
Consequences if not approved:	⌘ 'D' command will be inconsistent with +CGDATA command within 27.007.

Clauses affected:	⌘ 10.2.1.1, 10.2.1.2		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘ CR applies to Request Packet Domain IP service 'D' command, also		

10.2.1.1 Request Packet Domain service 'D'

Table 1: D command syntax

Command	Possible Response(s)
D*<GPRS_SC>[*[<called_address>] [*[<L2P>][*[<cid>[,<cid>[,...]]]]]]#	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>[,...]]]#	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.

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

Tdoc T2-010430

CR-Form-v3

CHANGE REQUEST

⌘ **27.007 CR 067** ⌘ rev **-** ⌘ Current version: **3.8.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title: ⌘ Inclusion of IPv6 and removal of X.25 and OSPIH <PDP_type> values

Source: ⌘ T2

Work item code: ⌘ TEI **Date:** ⌘

Category: ⌘ **F** **Release:** ⌘ REL-99

Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
F (essential correction)	2 (GSM Phase 2)
A (corresponds to a correction in an earlier release)	R96 (Release 1996)
B (Addition of feature),	R97 (Release 1997)
C (Functional modification of feature)	R98 (Release 1998)
D (Editorial modification)	R99 (Release 1999)
Detailed explanations of the above categories can be found in 3GPP TR 21.900.	REL-4 (Release 4)
	REL-5 (Release 5)

Reason for change: ⌘ REL-99 23.060 "GPRS Service Description" includes IPv6 for PDP type. X.25 and OSPIH PDP types are removed. The AT commands +CGDCONT and +CGDSCONT, which define the PDP contexts, shall be aligned with the GPRS specification.

Summary of change: ⌘ Added IPv6 and removal of X.25 and OSPIH <PDP_type> values in the AT commands +CGDCONT and +CGDSCONT

Consequences if not approved: ⌘ There is no clear way to distinguish between IPv4 and IPv6 PDP type. The AT commands for PDP context definition will not be aligned with the GPRS specifications

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> [, <PDP_addr> [, <d_comp> [, <h_comp> [, <pd1> [, ... [, <pdN>]]]]]]]]]]]	OK ERROR
+CGDCONT?	+CGDCONT: <cid>, <PDP_type>, <APN>, <PDP_addr>, <data_comp>, <head_comp>[, <pd1>[, ...[, <pdN>]]] [<CR><LF>+CGDCONT: <cid>, <PDP_type>, <APN>, <PDP_addr>, <data_comp>, <head_comp>[, <pd1>[, ...[, <pdN>]]] [...]]
+CGDCONT=?	+CGDCONT: (range of supported <cid>s) , <PDP_type> , , , (list of supported <d_comp>s) , (list of supported <h_comp>s) [, (list of supported <pd1>s) [, ... [, (list of supported <pdN>s)]]] [<CR><LF>+CGDCONT: (range of supported <cid>s) , <PDP_type> , , , (list of supported <d_comp>s) , (list of supported <h_comp>s) [, (list of supported <pd1>s) [, ... [, (list of supported <pdN>s)]]] [...]]

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)
<u>IPv6</u>	<u>Internet Protocol, version 6 (IETF RFC 2460)</u>
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> [,<h_comp>]]]	OK ERROR
+CGDSCONT?	+CGDSCONT: <cid>, <p_cid>, <data_comp>, <head_comp> [<CR><LF>+CGDSCONT: <cid>, <p_cid>, <data_comp>, <head_comp> [...]]
+CGDSCONT=?	+CGDSCONT: (range of supported <cid>s), (list of <cid>s for active primary contexts), <PDP_type>, , , (list of supported <d_comp>s), (list of supported <h_comp>s) [<CR><LF>+CGDSCONT: (range of supported <cid>s), (list of <cid>s for active primary contexts), <PDP_type>, , , (list of supported <d_comp>s), (list of supported <h_comp>s) [...]]

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)
<u>IPV6</u>	<u>Internet Protocol, version 6 (IETF RFC 2460)</u>
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 SNDTCP. If and when other algorithms become available, a command will be provided to select one or more of these. (GPRS only)

Implementation

Optional.

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

Tdoc T2-010431

CR-Form-v3

CHANGE REQUEST

⌘ **27.007 CR 068** ⌘ rev **-** ⌘ Current version: **4.1.0** ⌘

For **HELP** 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 Radio Access Network Core Network

Title: ⌘ Inclusion of IPv6 and removal of X.25 and OSPIH <PDP_type> values

Source: ⌘ T2

Work item code: ⌘ TEI4 **Date:** ⌘

Category: ⌘ **A** **Release:** ⌘ REL-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: ⌘ REL-4 23.060 "GPRS Service Description" includes IPv6 for PDP type. X.25 and OSPIH PDP types are removed. The AT commands +CGDCONT and +CGDSCONT, which define the PDP contexts, shall be aligned with the GPRS specification.

Summary of change: ⌘ Added IPv6 and removal of X.25 and OSPIH <PDP_type> values in the AT commands +CGDCONT and +CGDSCONT

Consequences if not approved: ⌘ There is no clear way to distinguish between IPv4 and IPv6 PDP type. The AT commands for PDP context definition will not be aligned with the GPRS specifications

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> [, <PDP_addr> [, <d_comp> [, <h_comp> [, <pd1> [, ... [, <pdN>]]]]]]]]]]	OK ERROR
+CGDCONT?	+CGDCONT: <cid>, <PDP_type>, <APN>, <PDP_addr>, <data_comp>, <head_comp>[, <pd1>[, ...[, <pdN>]]] [<CR><LF>+CGDCONT: <cid>, <PDP_type>, <APN>, <PDP_addr>, <data_comp>, <head_comp>[, <pd1>[, ...[, <pdN>]]] [...]]
+CGDCONT=?	+CGDCONT: (range of supported <cid>s) , <PDP_type> , , , (list of supported <d_comp>s) , (list of supported <h_comp>s) [, (list of supported <pd1>s) [, ... [, (list of supported <pdN>s)]]] [<CR><LF>+CGDCONT: (range of supported <cid>s) , <PDP_type> , , , (list of supported <d_comp>s) , (list of supported <h_comp>s) [, (list of supported <pd1>s) [, ... [, (list of supported <pdN>s)]]] [...]]

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)
<u>IPv6</u>	<u>Internet Protocol, version 6 (IETF RFC 2460)</u>
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> [,<h_comp>]]]	OK ERROR
+CGDSCONT?	+CGDSCONT: <cid>, <p_cid>, <data_comp>, <head_comp> [<CR><LF>+CGDSCONT: <cid>, <p_cid>, <data_comp>, <head_comp> [...]]
+CGDSCONT=?	+CGDSCONT: (range of supported <cid>s), (list of <cid>s for active primary contexts), <PDP_type>, , , (list of supported <d_comp>s), (list of supported <h_comp>s) [<CR><LF>+CGDSCONT: (range of supported <cid>s), (list of <cid>s for active primary contexts), <PDP_type>, , , (list of supported <d_comp>s), (list of supported <h_comp>s) [...]]

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)
<u>IPV6</u>	<u>Internet Protocol, version 6 (IETF RFC 2460)</u>
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 SNDTCP. If and when other algorithms become available, a command will be provided to select one or more of these. (GPRS only)

Implementation

Optional.