3GPP TSG-T (Terminals) Meeting #10
Bangkok, Thailand, 6 - 8 December, 2000

Tdoc TP-000202

Source: T3

Title: Change Requests to 3GPP 11.14 and 31.111 "(U)SIM application Toolkit"

Agenda item: 5.3.3

Document for: Approval

This document contains several change requests to TS 11.14 v8.4.0 and 31.111 v3.2.0 agreed by T3.

T3 Doc	Spec	CR	Rv	Rel	Subject
T3-000641	11.14	A189	2	R99	Clarification of bearer independent related to GPRS
T3-000644	11.14	A190	1	R99	Correction to device identity coding
T3-000647	11.14	A191		R99	Clarification of command qualifier related to LAUNCH BROWSER
T3-000618	11.14	A192		R99	Modification of general result for proactive command with user confirmation
T3-000634	11.14	A193		R99	General Clarification and Corrections
T3-000623	31.111	014		Rel-4	New event for display parameters
T3-000635	31.111	015		R99	General Clarification and Correction
T3-000636	31.111	016		Rel-4	General Clarification and Correction
T3-000637	31.111	017		R99	Clarification of command qualifier related to LAUNCH BROWSER
T3-000638	31.111	018		Rel-4	Clarification of command qualifier related to LAUNCH BROWSER
T3-000639	31.111	019		R99	Modification of general result for proactive command with user confirmation
T3-000640	31.111	020		Rel-4	Modification of general result for proactive command with user confirmation
T3-000642	31.111	021		R99	Clarification of bearer independent related to GPRS
T3-000643	31.111	022		Rel-4	Clarification of bearer independent related to GPRS
T3-000645	31.111	023		R99	Correction to device identity coding
T3-000646	31.111	024		Rel-4	Correction to device identity coding

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000641
(revised version of T3-000632)

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

11.14	CR	A189r2	Current Version:	8.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source: T3 **Date:** 2000-11-15

Subject: Clarification of bearer independent related to GPRS

Work item: SAT

Category: *(only one category shall be marked with an X)*

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: Currently the parameters used in OPEN CHANNEL are fully different following the bearer used. It is necessary to clearly define what is use for CSD , for GPRS, and so on.

Clauses affected: 3.2 – 6.4.27 – 6.4.28 – 6.4.29 – 6.4.30 – 6.6.27 – 6.11 – 12.52.1 – 12.52.2 – 12.54– 12.56 – 13.3 – Annex J

Other specs Affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply, in addition to those listed in GSM 01.04 [2]:

[…]

EF	Elementary File
EGPRS	EDGE General Packet Radio Service
ETSI	European Telecommunications Standards Institute
etu	elementary time unit
FDN	Fixed Dialling Number
GGSN	Gateway GPRS Support Node
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
ID	IDentifier
IEC	International Electrotechnical Commission
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
ISO	International Organization for Standardization
Kc	Cryptographic key; used by the cipher A5
Ki	Subscriber authentication key; the cryptographic key used by the authentication algorithm, A3, and cipher key generator, A8
lgth	The (specific) length of a data unit
LND	Last Number Dialled
ME	Mobile Equipment
MMI	Man Machine Interface
MS	Mobile Station
NMR	Network Measurement Results (see also GSM 04.08 [8])
NPI	Numbering Plan Identifier
PDN	Packet Data Network
PDP	Packet Data Protocol, e.g., Ip or X25 or PPP
PDU	Protocol Data Unit
R-APDU	Response Application Protocol Data Unit
RAND	A RANDom challenge issued by the network
RFU	Reserved for Future Use

[…]

6.4.27 OPEN CHANNEL

6.4.27.1 OPEN CHANNEL related to CS bearer

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The SIM shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The SIM provides to the ME a list of parameters necessary to establish a link.

The SIM may request the use of an automatic reconnection mechanism according to GSM 02.07 [19]. The SIM may also request an optional maximum duration for the reconnection mechanism. The ME shall attempt at least one link establishment set-up.

The SIM may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.

If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- If immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME sets up the channel using the best parameters it can support and informs the SIM of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification). ~~the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;~~

- If immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the SIM, the ME informs the SIM using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- If on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME sets up the channel using the best parameters it can support and informs the SIM of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- If the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- If the user does not accept the channel set-up, the ME informs the SIM using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME informs the SIM using TERMINAL RESPONSE(Proactive SIM session terminated by the user). The operation is aborted;

- If the command is rejected because the ME is busy on another call, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- If the command is rejected because the ME is busy on a SS transaction, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted;

The ME shall inform the SIM that the command has been successfully executed using TERMINAL RESPONSE:

- If immediate link establishment is requested, the ME allocates buffers , sets up the link and informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- If on demand link establishment is requested, the ME allocates buffers, informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

If the ME is able to set up the channel on the serving network, the ME shall:

- Alert the user (as for an incoming call). This is the confirmation phase.

- Optionally, the SIM may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below :

    - If the alpha identifier is provided by the SIM and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

    - If the alpha identifier is not provided by the SIM or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

  If the user accepts the channel, the ME shall then set up a channel;

- If the user does not accept the channel or rejects the channel, then the ME informs the SIM using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME shall send a TERMINAL RESPONSE with (Proactive SIM session terminated by the user) result value.

- Optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;

If the first link set-up attempt is unsuccessful:

- If the SIM did not request link re-connection then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and not retry to set-up the link;

- If the SIM requested link re-connection, then the ME may automatically retry to set-up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the SIM concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the SIM, then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;

- If the user stops the link set-up attempt or the re-try mechanism before a result is received from the network, the ME informs the SIM using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the SIM in this command.

6.4.27.2 OPEN CHANNEL related to GPRS

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The SIM shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The SIM provides to the ME a list of parameters necessary to ~~establish a link~~ activate a PDP context.

~~The SIM may request the use of an automatic reconnection mechanism according to GSM 02.07 [19]. The SIM may also request an optional maximum duration for the reconnection mechanism~~. The ME shall attempt at least one ~~link establishment set up~~PDP context activation.

~~The SIM may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.~~

~~If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.~~

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- If immediate ~~link establishment~~ PDP context activation is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME sets up the channel using the best parameters it can support and informs the SIM of the channel identifier and the modified parameters ~~best supported parameters~~ using TERMINAL RESPONSE (Command performed with modification~~Command beyond ME's capabilities~~). ~~The operation is aborted~~;

- If immediate ~~link establishment~~ PDP context activation is requested and the ME is unable to activate the PDP context ~~set up the link~~ with the network using the exact parameters provided by the SIM, the ME informs the SIM using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- If on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME sets up the channel using the best parameters it can support and informs the SIM of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- If the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- If the user does not accept the channel set-up, the ME informs the SIM using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME informs the SIM using TERMINAL RESPONSE(Proactive SIM session terminated by the user). The operation is aborted;

- If the command is rejected because the class B ME is busy on ~~another~~ call, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- If the command is rejected because the class B ME is busy on a SS transaction, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted;

The ME shall inform the SIM that the command has been successfully executed using TERMINAL RESPONSE:

- If immediate ~~link establishment~~PDP context activation ~~-~~is requested, the ME allocates buffers , ~~sets up the link~~activates the PDP context and informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- If on demand ~~link establishment~~ PDP context activation is requested, the ME allocates buffers, informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

If the ME is able to set up the channel on the serving network, the ME shall:

- Alert the user (as for an incoming call). This is the confirmation phase.

- Optionally, the SIM may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below :

  - If the alpha identifier is provided by the SIM and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

  - If the alpha identifier is not provided by the SIM or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

  If the user accepts the channel, the ME shall then set up a channel;

- If the user does not accept the channel or rejects the channel, then the ME informs the SIM using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME shall send a TERMINAL RESPONSE with (Proactive SIM session terminated by the user) result value.

- Optionally, during ~~call set up~~PDP context activation, the ME can give some audible or display indication concerning what is happening;

~~If the first link set-up attempt is unsuccessful:~~

- ~~If the SIM did not request link re-connection then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and not retry to set up the link;~~

- ~~If the SIM requested link re-connection, then the ME may automatically retry to set up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the SIM concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the SIM, then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;~~

- If the user stops the ~~link set-up~~ PDP context activation attempt ~~or the re-try mechanism~~ before a result is received from the network, the ME informs the SIM using TERMINAL RESPONSE (user cleared down call before connection or network release).

~~If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the SIM in this command.~~

[…]

6.4.28 CLOSE CHANNEL

This subclause applies only if class "e" is supported.

This command requests the ME to close the channel corresponding to the Channel identifier.

Upon receiving this command, the ME shall decide if it is able to execute the command:

- If the command is rejected because the channel identifier is not valid, the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error);
- If the command is rejected because the requested channel is in error, the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error);

If the ME is able to process the command:

- the ME shall release the data transfer~~link~~, discard the remaining data and inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE;
- Optionally, during CLOSE CHANNEL, the ME can give some audible or display indication concerning what is happening. In this intention, the SIM may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:
  - If the alpha identifier is provided by the SIM and is not a null data object, the ME shall use it to indicate the link closing phase. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).
  - If the alpha identifier is not provided by the SIM or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

6.4.29 RECEIVE DATA

This subclause applies only if class "e" is supported.

This command requests the ME to return data from a dedicated Channel identifier according to the number of bytes specified by the SIM.

Upon receiving this command, the ME shall return the data available in the Rx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive:

If the ME is unable to process the command:

- If the command is rejected because the requested channel is already closed the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error);
- If the user has indicated the need to end the proactive SIM session, the ME informs the SIM using TERMINAL RESPONSE (Proactive SIM session terminated by the user).

If the ME is able to process the command:

- If the requested number of bytes is available in the buffer, the ME shall inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE and return the requested data and the number of bytes remaining in the channel buffer (or FF if more than the maximum bytes remains).
- If the requested number of bytes is not yet available in the buffer, the ME shall NOT wait for the requested number of bytes to arrive. The ME shall inform the SIM, using TERMINAL RESPONSE (Command performed with missing information) and returns the data currently available in the channel buffer.

- In the case of packet/datagram transmission, the ME shall put in the Rx buffer a complete packet SDU and only one at one time. For example, if UDP datagrams are received by the ME, the latter shall insert only the SDU of each UDP packet received in the Rx buffer. After one SDU has been downloaded by the SIM (using one or several RECEIVE DATA commands), the ME shall insert the next SDU of UDP datagram, and so on.

~~in the case of structured transmission, the structure of the service data unit received by the ME shall be kept intact and shall be fully respected while receiving. The size of service data unit included in the packet PDU is therefore limited to the maximum size of "channel data" in "receive data" response. The ME shall put only one complete service data unit in RX buffer at one time and wait for the RX buffer to be empty before sending the next user data unit. Then the SIM shall receive all "channel data" in one "receive data" command. The SDU is therefore limited to the maximum size of channel data string in terminal response.~~

- If the alpha identifier is provided by the SIM, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.4.30 SEND DATA

This subclause applies only if class "e" is supported.

This command requests the ME to send data through a previously set up data channel corresponding to a dedicated Channel identifier. The SIM informs the ME if the data is :

- to be sent immediately;

- or to be stored in a Tx buffer. Then it is up to the ME to manage the data sending in order to use the bearer in an optimised way. To send the data stored in a Tx buffer, the ME shall be notified by a "send data immediately" and it shall consider the data presently and previously concatenated in its Tx buffer as one SDU, and send it in only one PDU. The Tx buffer shall then be emptied before returning the TERMINAL RESPONSE to the SIM and allowing new SIM sending.

Upon receiving this command, the ME shall either immediately send data or store provided data into the Tx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive:

- If the ME is unable to process the command:

  - If the command is rejected because the requested channel is already closed the ME informs the SIM using TERMINAL RESPONSE (Bearer Independent Protocol error);

  - If the command is rejected because the channel is temporarily unavailable the ME informs the SIM using TERMINAL RESPONSE (ME currently unable to process command);

  - If the requested number of bytes of empty space is not yet available in the buffer the ME informs the SIM using TERMINAL RESPONSE (Bearer Independent Protocol error);

  - If the user has indicated the need to end the proactive SIM session, the ME informs the SIM using TERMINAL RESPONSE (Proactive SIM session terminated by the user).

- If the ME is able to process the command:

  - If the requested number of bytes of empty space is available in the buffer the ME shall inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE and return the number of bytes of empty space available in the Tx buffer (or FF if more then 255 bytes are available).

- ~~—~~in the case of packet/datagram transmission, the structure of the SDU sent by the SIM to the ME shall be fully respected while sending to the ME external interface. The size of the SDU is therefore limited by the size of the packet PDU sent over the ME external interface. In order to send one complete SDU, the SAT application may fill the Tx buffer with several SEND DATA commands, if necessary . Then the ME shall send the complete SDU in one packet PDU.

~~in the case of structured transmission , the structure of the service data unit sent by the application shall be kept intact and shall be fully respected while sending. The size of service data unit in the packet PDU is therefore~~

~~limited to the size of "channel data" in the send data command. The SIM application shall send user data unit in one send data command. Then the ME shall send "channel data" in one packet PDU. The SDU is therefore limited to the maximum size of channel data string in data send command.~~

- If the alpha identifier is provided by the SIM, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.6.27.1 OPEN CHANNEL related to CS bearer

Description	Section	M/O	Min	Length
Proactive SIM command Tag	13.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J+K+L+M+N+O+~~P+Q~~)	-	M	Y	1 or 2
Command details	12.6	M	Y	A
Device identities	12.7	M	Y	B
Alpha identifier	12.2	O	N	C
Icon identifier	12.31	O	N	D
Address	12.1	~~C~~M	Y	E
Called party subaddress	12.3	O	N	F
Duration 1	12.8	O	N	G
Duration 2	12.8	O	N	H
Bearer description	12.52	M	Y	I
Buffer size	12.55	M	Y~~N~~	J
~~URL (Access Point address)~~	~~12.48~~	~~O~~	~~N~~	~~K~~
Other address (local address)	12.58	O	N	~~L~~K
Text String (User login)	12.15	O	N	~~M~~L
Text String (User password)	12.15	O	N	~~N~~M
SIM/ME interface transport level	12.59	O	N	~~O~~N
~~URL (data destination address)~~	~~12.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	12.58	~~C~~O	~~Y~~N	~~Q~~O

~~The Address is requested for CS bearer, for other bearer it is ignored. If the parameter is not present, the mobile uses the default address mobile configuration if any.~~

The Subaddress may be requested ~~for CS bearer only, for other bearer it is ignored~~. If the called party subaddress is not present, the ME shall not provide a called party subaddress to the network.

Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present, the SIM imposes no restrictions on the ME.

Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link. If duration 2 is not present the link is never released automatically by the ME.

~~The Access point address may be requested for GPRS bearer only. For other bearers, it shall be ignored. The Access point address parameter is a URL (see 12.48) which provides information to the ME necessary to identify the entity which provides interworking with an external network. If the parameter is not present, the mobile may use the default access point address mobile configuration or subscription value.~~

The local address parameter (see 12.58) provides information to the ME necessary to identify the local device (i.e. it provides an IP address). If local address length is null, dynamic local address is required. If parameter is not present, the mobile may use the mobile default local address configuration.

The ME may support a remote access login feature (e.g. PPP login). If supported by the ME, the SIM may provide 'User login' and 'User password' parameters which allow the ME to answer an access authentication challenge . If only one parameter is present, it is considered as the User Login and the ME shall use default Password configuration if any. If the parameters are not present, the ME shall use default Login/Password configuration if any. If no authentication challenge is requested, the user login and password parameters shall be ignored.

~~User login parameter is a text string (see 12.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 12.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are SDUs. When the SAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the SAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the SAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [27])~~.~~, and the SAT application is in charge of the network and transport layer ~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport-PDU.~~

The Data destination address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be a URL or~~ is a data network address. ~~If a URL and a data network address is present, the URL shall be ignored.~~

6.6.27.2 OPEN CHANNEL related to GPRS

Description	Section	M/O	Min	Length
Proactive SIM command Tag	13.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J ~~+K+L+M+N+O+P+Q~~)	-	M	Y	1 or 2
Command details	12.6	M	Y	A
Device identities	12.7	M	Y	B
Alpha identifier	12.2	O	N	C
Icon identifier	12.31	O	N	D
~~Address~~	~~12.1~~	~~C~~	~~Y~~	~~E~~
~~Called party subaddress~~	~~12.3~~	~~O~~	~~N~~	~~F~~
~~Duration 1~~	~~12.8~~	~~O~~	~~N~~	~~G~~
~~Duration 2~~	~~12.8~~	~~O~~	~~N~~	~~H~~
Bearer description	12.52	M	Y	~~I~~E
Buffer size	12.55	M	YN~~Y~~	~~J~~F
~~URL (~~Access Point ~~address~~Name~~)~~	12.48	O	N	~~K~~G
Other address (local address)	12.58	O	N	~~L~~H
~~Text String (User login)~~	~~12.15~~	~~O~~	~~N~~	~~M~~
~~Text String (User password)~~	~~12.15~~	~~O~~	~~N~~	~~N~~
SIM/ME interface transport level	12.59	O	N	~~O~~I
~~URL (data destination address)~~	~~12.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	12.58	~~C~~O	~~Y~~N	~~Q~~J

~~The Address is requested for CS bearer, for other bearer it is ignored. If the parameter is not present, the mobile uses the default address mobile configuration if any.~~

~~The Subaddress may be requested for CS bearer only, for other bearer it is ignored. If the called party subaddress is not present, the ME shall not provide a called party subaddress to the network.~~

~~Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present, the SIM imposes no restrictions on the ME.~~

~~Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link.If duration 2 is not present the link is never released automatically by the ME.~~

The Access ~~p~~Point ~~address~~ Name may be requested ~~for GPRS bearer only~~. ~~For other bearers, it shall be ignored.~~ The Access ~~p~~Point ~~address~~ Name parameter is an URL (see 12.48) which provides information to the ME necessary to identify the ~~entity~~ Gateway GSN(GGSN) which provides interworking with an external packet data network. If the parameter is not present, the mobile may use the default A~~a~~ccess P~~p~~oint Name ~~address~~ in the mobile configuration or the default subscription value.

The local address parameter (see 12.58) provides information to the ME necessary to identify the local device. ~~(i.e.~~ If the parameter is present and length is not null, it provides an IP address~~)~~ that identifies the SAT application in the address area applicable to the PDN. If local address length is null, dynamic local address allocation is required for the SAT application. If parameter is not present, the mobile may use the mobile default local address configuration.

~~User login parameter is a text string (see 12.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 12.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are SDUs. When the SAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the SAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the SAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [27]) ,and the SAT application is in charge of the network and transport layer. ~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport-PDU.~~

The ~~Data~~ D~~d~~estination ~~a~~Address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be~~ is ~~a URL or~~ a data network address (e.g. IP address). ~~If a URL and a data network address is present, the URL shall be ignored~~.

[…]

6.11 Proactive commands versus possible Terminal response

The following table shows for each proactive command the possible terminal response returned (marked by a "•" character).

		Proactive Command										
Terminal response		CARD APDU '30'	POWER ON CARD '31'	POWER OFF CARD '32'	GET READ-ER STATUS '33'	RUN AT COMM-AND '34'	LANG NOTIFI CA TION '35'	OPEN CHANNEL '40'	CLOSE CHANNEL '41'	RECEIVE DATA '42'	SEND DATA '43'	GET CHANNEL STATUS '44'
'00'	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●
'01'	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●
'02'	Command performed, with missing info	●	●	●	●	●	●	●	●	●	●	●
'03'	REFRESH performed with additional EFs read											
'04'	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●
'05'	Command performed, but modified by call control by SIM.											
'06'	Command performed successfully, limited service											
'07'	Command performed with modification							●				
'10'	Proactive SIM session terminated by user							●	●	●	●	●
'11'	Backward move in the proactive SIM session requested by the user											
'12'	No response from user											
'13'	Help information required by the user											
'14'	USSD/SS Transact terminated by user							●	●	●	●	●
'20'	ME currently unable to process command	●	●	●	●	●	●	●	●	●	●	●
'21'	Network currently unable to process command							●			●	
'22'	User did not accept call setup request							●				
'23'	User cleared down call before connection or network release											
'24'	Action in contradiction with the current timer state							●				
'25'	Interaction with call control by SIM, temporary problem							●	●	●	●	●
'26'	Launch Browser generic error											
'30'	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●
'31'	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●
'32'	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●
'33'	Command number not known by ME	●	●	●	●	●	●	●	●	●	●	●
'34'	SS Return Error											
'35'	SMS RPERROR							●	●	●	●	●
'36'	Error, required values are missing	●	●	●	●	●	●	●	●	●	●	●
'37'	USSD return error											
'38'	Multiple Card command error	●	●	●	●							
'39'	Interaction with call control by SIM or MO SM control by SIM, permanent problem								●	●	●	
'3A'	Bearer Independent Protocol error							●	●	●	●	

12.52.1 Bearer parameters for CSD

Contents: parameters specific to the bearer.

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 and values of these subparameters are supported by GSM (refer GSM 02.02 [30]).

X (length of parameters) = 3.

Coding:

The following values are as defined in the GSM 07.07 [27]. for the select service bearer type "+CBST" extended command. They are coded in hexadecimal.

Coding of Byte 4 - Data rate : as the <speed> subparameter defined in [27].

'00' autobauding (automatic selection of the speed; this setting is possible in case of 3.1 kHz modem and non-transparent service)
'01' 300 bps (V.21)
'02' 1200 bps (V.22)
'03' 1200/75 bps (V.23)
'04' 2400 bps (V.22bis)
'05' 2400 bps (V.26ter)
'06' 4800 bps (V.32)
'07' 9600 bps (V.32)
'0C' 9600 bps (V.34)
'0E' 14400 bps (V.34)
'0F' 19200 bps (V.34)
'10' 28800 bps (V.34)
'22' 1200 bps (V.120)
'24' 2400 bps (V.120)
'26' 4800 bps (V.120)
'27' 9600 bps (V.120)
'2B' 14400 bps (V.120)
'2F' 19200 bps (V.120)
'30' 28800 bps (V.120)
'31' 38400 bps (V.120)
'32' 48000 bps (V.120)
'33' 56000 bps (V.120)
'41' 300 bps (V.110)
'42' 1200 bps (V.110)
'44' 2400 bps (V.110 or X.31 flag stuffing)
'46' 4800 bps (V.110 or X.31 flag stuffing)
'47' 9600 bps (V.110 or X.31 flag stuffing)
'4B' 14400 bps (V.110 or X.31 flag stuffing)
'4F' 19200 bps (V.110 or X.31 flag stuffing)
'50' 28800 bps (V.110 or X.31 flag stuffing)
'51' 38400 bps (V.110 or X.31 flag stuffing)
'52' 48000 bps (V.110 or X.31 flag stuffing)
'53' 56000 bps (V.110 or X.31 flag stuffing)
'73' 56000 bps (bit transparent)
'74' 64000 bps (bit transparent)
all other values are reserved for future use

Coding of byte 5 - bearer service: as the <name> subparameter defined in [27].

'00' data circuit asynchronous (UDI or 3.1 kHz modem)
'01' data circuit synchronous (UDI or 3.1 kHz modem)
'02' PAD Access (asynchronous) (UDI)
'03' Packet Access (synchronous) (UDI)
'04' data circuit asynchronous (RDI)

'05' data circuit synchronous (RDI)
'06' PAD Access (asynchronous) (RDI)
'07' Packet Access (synchronous) (RDI)
all other values are reserved for future use

Coding of Byte 6 - connection element : as the <ce> subparameter defined in [27].

'00' transparent
'01' non-transparent
'02' both, transparent preferred
'03' both, non-transparent preferred
all other values are reserved for future use

12.52.2 Bearer parameters for GPRS /Packet Service

Contents : parameters describing the Quality of Service (QoS) and the type of PDP. This is an element of the PDP context.

Contents: parameters specific to the bearer.

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 and values of these subparameters are supported by GSM (refer GSM 02.02 [30]).

X (length of parameters) = 8.

Coding : The following values are as defined in the [27], for the quality of Service profile requested "+CGQREQ" extended command. They are coded in hexadecimal.

Coding:

Coding of Byte 4 - Precedence class: as the <precedence> subparameter, defined in [27].
'01' 1 (High priority)
'02' 2 (Normal priority)
'03' 3 (Low priority)
all other values are reserved for future use

Coding of Byte 5 - Delay class: as the <delay> subparameter, defined in [27].
'01' 1
'02' 2
'03' 3
'04' 4
all other values are reserved for future use

Coding of Byte 6 - Reliability class: as the <reliability> subparameter, defined in [27].
'01' 1
'02' 2
'03' 3
'04' 4
'05' 5
all other values are reserved for future use

Coding of Byte 7 - Peak throughput class: as the <peak> subparameter, defined in [27].
'01' 1 (up to 8 kbit/s)
'02' 2 (up to 16 kbit/s)
'03' 3 (up to 32 kbit/s)
'04' 4 (up to 64 kbit/s)
'05' 5 (up to 128 kbit/s)
'06' 6 (up to 256 kbit/s)
'07' 7 (up to 512 kbit/s)
'08' 8 (up to 1024 kbit/s)
'09' 9 (up to 2048 kbit/s)
all other values are reserved for future use

Coding of Byte 8 - Mean throughput ~~class~~: as the <mean> subparameter, defined in [27].

~~- '01' 1 (~0.22 bit/s)~~
~~'02' 2 (~0.44 bit/s)~~
~~'03' 3 (~1.11 bit/s)~~
~~'04' 4 (~2.2 bit/s)~~
~~'05' 5 (~4.4 bit/s)~~
~~'06' 6 (~11.1 bit/s)~~
~~'07' 7 (~22 bit/s)~~
~~'08' 8 (~44 bit/s)~~
~~- '09' 9 (~111 bit/s)~~
~~'0A' 10 (~0.22 kbit/s)~~
~~'0B' 11 (~0.44 kbit/s)~~
~~'0C' 12 (~1.11 kbit/s)~~
~~'0D' 13 (~2.2 kbit/s)~~
~~'0E' 14 (~4.4 kbit/s)~~
~~'0F' 15 (~11.1 kbit/s)~~
~~'10' 16 (~22 kbit/s)~~
~~'11' 17 (~44 kbit/s)~~
~~'12' 18 (~111 kbit/s)~~
~~'13' 31 (best effort)~~
~~all other values are reserved for future use~~

Coding of Byte 9 - Packet data protocol type:

~~'01' X25 (ITU-T/CCIT X.25 layer 3)~~
- '02' IP (Internet Protocol, IETF STD 5)
~~'03' OSPIH (Internet Hosted Octet Stream Protocol)~~
~~'05' PPP (Point-to-Point Protocol, IETF STD 51)~~
- all other values are reserved for future use

~~Coding of Byte 10 Data compression:~~
~~- '00' off~~
~~'01' on~~
~~all other values are reserved for future use~~

~~Coding of Byte 11 TCP/IP header Compression:~~
~~'00' off~~
~~'01' on~~
~~all other values are reserved for future use~~

12.54 Channel data length

This subclause applies only if class "e" is supported.

Byte(s)	Description	Length
1	Channel data length tag	1
2	Length (1)	1
3	Channel data length	1

The Channel data length codes :

- either the number of bytes that are available in a channel buffer (Tx or Rx buffers negotiated during OPEN CHANNEL) using TERMINAL RESPONSE~~,~~. Since the Tx or Rx buffer size can be larger than 255 bytes, 'FF' means "more than 255 bytes are available".

- or the number of bytes that are requested in a RECEIVE DATA or transmitted in a SEND DATA command.

12.56 Channel status

This subclause applies only if class "e" is supported.

Byte(s)	Description	Length
1	Data tag	1
2	Length (2)	1
3 to 4	Channel status	2

Contents :

The Channel status is a string of binary coded characters.

Coding of byte 3:

bit 1 to 3: Channel identifier : 1..7
Channel identifier 0 means "No channel available"

bit 4 to 7: RFU

bit 8: 0 = Link not established or PDP context not activated
1 = Link established or PDP context activated

Coding of byte 4:

- '00' = No further info can be given
- '01' = ~~Rx buffer full~~Not used
- '02' = ~~Rx buffer empty~~Not used
- '03' = ~~Tx buffer full~~Not used
- '04' = ~~Tx buffer empty~~Not used
- '05' = Link dropped

all other values are reserved for future use

13.3 SIMPLE-TLV tags in both directions

[…]

Description		Length of tag	Tag value, bits 1-7 (Range: '01' - '7E')	Tag (CR and Tag value)
[…]		…	…	…
The '2F' tag is reserved for use by 3GPP			'2F'	
Browser Identity tag	class "c" only	1	'30'	'30' or 'B0'
URL tag	class "c" or "e"~~only~~	1	'31'	'31' or 'B1'
Bearer tag	class "c" only	1	'32'	'32' or 'B2'
Provisioning Reference File tag	class "c" only	1	'33'	'33' or 'B3'
Browser Termination Cause tag	class "c" only	1	'34'	'34' or 'B4'
Bearer description tag	class "e" only	1	'35'	'35' or 'B5'
Channel data tag	class "e" only	1	'36'	'36' or 'B6'
Channel data length tag	class "e" only	1	'37'	'37' or 'B7'
Channel status tag	class "e" only	1	'38'	'38' or 'B8'
Buffer size tag	class "e" only	1	'39'	'39' or 'B9'

Continued…..

Description	Length of tag	Tag value, bits 1-7 (Range: '01' - '7E')	Tag (CR and Tag value)
Card reader identifier tag class "a" only	1	'3A'	'3A' or 'BA'
~~Text String (User password) class "e" only~~	~~1~~	~~'3B'~~	~~'3B' or 'BB'~~
SIM/ME interface transport level class "e" only	1	'3C'	'3C' or 'BC'
~~URL (data destination address) class "e" only~~	~~1~~	~~'3D'~~	~~'3D' or 'BD'~~
Other address (data destination address) class "e" only	1	'3E'	'3E' or 'BE'
Reserved for TIA/EIA-136	1	'60'	'60' or 'E0'
Reserved for TIA/EIA-136	1	'61'	'61' or 'E1'

v

Annex J (informative): Bearer independent protocol proactive command examples

[...]

Example for GPRS bearer:

ICC	ME	SGSN
OPEN CHANNEL		
OPEN CHANNEL (immediate, Bearer description(bearer type=GPRS, QoS, PDP type=IP), Buffer size, APN, SIM/ME interface transport level (UDP, port *p*), data destination address)⟶		
		Attach request ⟶
		⟵ Attach accept
		Activate PDP context Request (Requested PDP address, QoS, APN, PDP Type ⟶
		⟵ Activate PDP context Accept (PDP address, negotiated QoS, PDP type)
⟵ Terminal Response (Channel identifier, link established, no further information, buffer size)		
⟵ ENVELOPE (Channel status event: Channel identifier, link established)		
CLOSE CHANNEL		
CLOSE CHANNEL(Channel identifier) ⟶		
		Deactivate PDP context request ⟶
		⟵ Deactivate PDP context accept
⟵ Terminal Response(OK)		
RECEIVE DATA		
		⟵ Data (one complete SDU received)
⟵ ENVELOPE (Data available)		
RECEIVE DATA (Channel Data length) ⟶		
⟵ Terminal Response(Channel Data Length, Data<=Length)		
RECEIVE DATA (Channel Data length) ⟶		
⟵ Terminal Response(Channel Data Length, Data<=Length)		
RECEIVE DATA (Channel Data length) ⟶		
⟵ Terminal Response(Channel Data Length = 0, Data<=Length)		

SEND DATA 'Stored in Tx Buffer'

SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Immediate, Data) ⟶ ⟵ Terminal Response(Channel Data length = 0)	Data ⟶

GET CHANNEL STATUS

GET CHANNEL STATUS ⟶ ⟵ Terminal Response (Channel status)	1 Channel available

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000644

CHANGE REQUEST

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11.14	**CR**	**A190 rev1**	Current Version:	8.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG-T #10 *list expected approval meeting # here ↑*

for approval [X] for information [ ]

strategic [ ] non-strategic [ ] *(for SMG use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 15/11/2000

Subject: Correction to device identity coding

Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	[X]	**Release:**	Phase 2	[ ]
A	Corresponds to a correction in an earlier release	[ ]		Release 96	[ ]
B	Addition of feature	[ ]		Release 97	[ ]
C	Functional modification of feature	[ ]		Release 98	[ ]
D	Editorial modification	[ ]		Release 99	[X]
				Release 00	[ ]

Reason for change: Inconsistency resolution between clauses 12.7 and 12.56.
In clause 12.56 it is mentioned that Channel 0 means no channel available. In Terminal Profile, only 7 channels can be defined (see clause 5.2)

Clauses affected: 12.7

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

12.7 Device identities

Byte(s)	Description	Length
1	Device identities tag	1
2	Length = '02'	1
3	Source device identity	1
4	Destination device identity	1

- Source device identity

Contents: the source device for information held in the data objects which follow.

- Destination device identity

Contents: the destination device for information held in the data objects which follow.

NOTE: Only some combinations of Type of Command, Data Download type and Device identities are allowed. These are defined in clause 14.

Coding: both Source and Destination device identities are coded as follows:

- '01' = Keypad
- '02' = Display
- '03' = Earpiece
- '10' to '17' = Additional Card Reader x (0 to 7). Value assigned by ME.
- ~~'20'~~ '21' to '27' = Channel x (~~0~~ 1 to 7). Value assigned by ME (if class "e" is supported).
- '81' = SIM
- '82' = ME
- '83' = Network

All other values are reserved.

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000647
(revised version of T3-000611)

CHANGE REQUEST

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11.14	CR	A191	Current Version:	8.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14		
Subject:	Correction of LAUNCH BROWSER				
Work item:	SIM Application Toolkit				

Category: *(only one category shall be marked with an X)*				**Release:**	
F	Correction	X		Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

The way to launch the browser is defined by the command qualifier. Some values may lead to inconsistencies in between the browser configuration data provided by “Gateway/Proxy ID” or “Provisioning File Reference” data objects .

The bearer data object in the LAUNCH BROWSER has a sense only if the SAT application is aware of the Gateway used. If the Gateway/Proxy ID data object is not included in the proactive command, the bearer data will be discarded.
There a need to indicate that the bearer data object is a conditional object.

Clauses affected: 6.6.26 - 12.6

Other specs affected:			
Other 3G core specifications		→	List of CRs:
Other GSM core specifications		→	List of CRs:
MS test specifications		→	List of CRs:
BSS test specifications		→	List of CRs:
O&M specifications		→	List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

6.6.26 LAUNCH BROWSER

Description	Subclause	M/O	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G+H+I)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device Identities	8.7	M	Y	B
Browser Identity	8.47	O	N	C
URL	8.48	M	Y	D
Bearer	8.49	O	N	E
Provisioning File Reference 1	8.50	O	N	F1
Provisioning File Reference 2	8.50	O	N	F2
Provisioning File Reference N	8.50	O	N	FN
Text String (Gateway/Proxy Identity)	8.15	O	N	G
Alpha identifier (user confirmation phase)	8.2	O	N	H
Icon identifier (user confirmation phase)	8.31	O	N	I

If the URL data object is provisioned the URL value shall take precedence over any other URL value.

If Provisioning File Reference data object is present in the command then it shall take precedence over Bearer and Proxy Identity. If several Provisioning File References are present in the same command the information in the first reference shall take precedence.

Gateway/Proxy Identity is a text string which gives to the mobile the name/identity of the Gateway/Proxy to be used for connecting to the URL. This Gateway/Proxy Identity is required when the bearer data object is present.

12.6 Command details

Byte(s)	Description	Length
1	Command details tag	1
2	Length = '03'	1
3	Command number	1
4	Type of command	1
5	Command Qualifier	1

- Command number

For contents and coding, see subclause 6.5.1.

- Type of command:

Contents: The Type of Command specifies the required interpretation of the data objects which follow, and the required ME procedure.

Coding:
See section 13.4
The ME shall respond to reserved values (i.e. values not listed) with the result "Command type not understood".

- Command Qualifier:

Contents: Qualifiers specific to the command.

Coding:

- REFRESH;

'00' =SIM Initialization and Full File Change Notification;
'01' = File Change Notification;
'02' = SIM Initialization and File Change Notification;
'03' = SIM Initialization;
'04' = SIM Reset;
'05' to 'FF' = reserved values.

[…]

- LAUNCH BROWSER
  '00' = launch browser ~~without making a connection~~, if not already launched ;
  '01' = ~~launch browser, making a connection, if not already launched~~ not used;
  '02' = use the existing browser (the browser shall not use the active existing secured session) ;
  '03' = close the existing browser session and launch new browser session, ~~making a connection~~ ;
  '04' = ~~close the existing browser session and launch new browser session, using a secure session~~not used ;
  '05' to 'FF' = RFU.

- OPEN CHANNEL (if class "e" is supported)
  bit 1: 0 = on demand link establishment
  1 = immediate link establishment
  bits 2 to 8: = RFU

- CLOSE CHANNEL (if class "e" is supported)
  This byte is RFU.

- RECEIVE DATA (if class "e" is supported)
  This byte is RFU

- SEND DATA (if class "e" is supported)
  bit 1: 0 = store data in Tx buffer
  1 = Send data immediately
  bits 2 to 8: = RFU

- GET CHANNEL STATUS (if class "e" is supported)
  This byte is RFU

The ME shall respond to reserved values with the result "Command type not understood".

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Seoul, Korea, 13 - 15 November, 2000

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CHANGE REQUEST

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11.14	CR	A192	Current Version:	8.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14		
Subject:	Modification of general result for proactive command with user confirmation				
Work item:	SIM Application Toolkit				

Category: *(only one category shall be marked with an X)*				**Release:**		
	F	Correction	X		Phase 2	
	A	Corresponds to a correction in an earlier release			Release 96	
	B	Addition of feature			Release 97	
	C	Functional modification of feature			Release 98	
	D	Editorial modification			Release 99	X
					Release 00	

Reason for change:
When a proactive command includes a user confirmation, the user is requested to accept or refuse the command, the only result that the ME can provide to the SIM card is “User did not accept call set-up request”. The notion of “call set-up request” for the new command LAUNCH BROWSER / OPEN CHANNEL is no more correct following the bearer used.
There is a need to modify the existing result in order to be more generic. The modification will not lead to a backward compatibility.

Clauses affected: 6.4.13- 6.4.27 – 6.7 - 6.11 - 12.12

Other specs affected:			
Other 3G core specifications		→ List of CRs:	
Other GSM core specifications		→ List of CRs:	
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments:

help.doc

<---------- double-click here for help and instructions on how to create a CR.

6.4.13 SET UP CALL

[…]

- If the user accepts the call, the ME shall then set up a call to the destination address given in the response data, with the relevant capability configuration parameters and called party subaddress (if provided by the SIM);

- If the user does not accept the call, or rejects the call, then the ME informs the SIM using TERMINAL RESPONSE (user did not ~~accept call set-up request~~accept the proactive command). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME shall send a TERMINAL RESPONSE with "Proactive SIM session terminated by the user" result value.

- Optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;

- Once a CONNECT message has been received from the network (defined in GSM 04.08), the ME shall inform the SIM that the command has been successfully executed, using TERMINAL RESPONSE. Operation of the call then proceeds as normal.

If the first call set-up attempt is unsuccessful:

- If the SIM did not request redial then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and not redial to set-up the call;

- If the SIM requested redial, then the ME may automatically redial the call (depending on its capability/configuration). In this case, the ME shall not send a command result to the SIM concerning the first or any subsequent failed set-up attempts. If the call set-up has not been successful, and the ME is not going to perform any more redials, or the time elapsed since the first call set-up attempt has exceeded the duration requested by the SIM, then the ME shall inform the SIM using TERMINAL RESPONSE (network currently unable to process command), and the redial mechanism shall be terminated;

- If the user stops the call set-up attempt or the redial mechanism before a result is received from the network, the ME informs the SIM using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the call set-up details (called party number and associated parameters) sent by the SIM in this command.

[…]

6.4.27 OPEN CHANNEL

[…]

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- If immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME informs the SIM of the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;

- If immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the SIM, the ME informs the SIM using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- If on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the SIM, the ME sets up the channel using the best parameters it can support and informs the SIM of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- If the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the SIM using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- If the user does not accept the channel set-up, the ME informs the SIM using TERMINAL RESPONSE (User did not accept the proactive command~~accept call set-up request~~). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME informs the SIM using TERMINAL RESPONSE(Proactive SIM session terminated by the user). The operation is aborted;

- If the command is rejected because the ME is busy on another call, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- If the command is rejected because the ME is busy on a SS transaction, the ME informs the SIM using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted;

The ME shall inform the SIM that the command has been successfully executed using TERMINAL RESPONSE:

- If immediate link establishment is requested, the ME allocates buffers , sets up the linkand informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- If on demand link establishment is requested, the ME allocates buffers, informs the SIM and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

If the ME is able to set up the channel on the serving network, the ME shall:

- Alert the user (as for an incoming call). This is the confirmation phase.

- Optionally, the SIM may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below :

    - If the alpha identifier is provided by the SIM and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

    - If the alpha identifier is not provided by the SIM or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

  If the user accepts the channel, the ME shall then set up a channel;

- If the user does not accept the channel or rejects the channel, then the ME informs the SIM using TERMINAL RESPONSE (user did not accept the proactive command~~accept call set-up request~~). The operation is aborted;

- If the user has indicated the need to end the proactive SIM session, the ME shall send a TERMINAL RESPONSE with (Proactive SIM session terminated by the user) result value.

- Optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;

[…]

6.7 Command results

[…]

Temporary problems are further defined as:

- ME is currently unable to process the command. Specific causes for this are:
- the screen is busy;
- ME currently busy on a call;
- ME currently busy on SEND DTMF operation;
- ME currently busy on SS transaction;
- ME currently busy on USSD operation;
- no service is currently available;
- access control class barred on serving network;
- no radio resource currently available;
- not in speech call.

  If none of these can be made to apply, a "no cause can be given" value can be used.

- Network is currently unable to process the command. Specific cause values are the cause values given by the network, as defined in GSM 04.08 [8].

- ~~The user did not accept the call set up request. This is where the ME alerts the user before setting up a call, and the user either rejected or did not accept the "call".~~

- In some proactive commands the ME is required to solicit and receive approval of the user before executing the proactive command. In the case that the user does not give approval for the execution of the proactive command it is not executed by the ME and the terminal response “user did not accept the proactive command” is returned by the ME to the SIM.

- The user cleared down the call, before the call connected (CONNECT received from network, as defined in GSM 04.08 [8]) or before the network released the call.

- Action in contradiction with the current timer state. This is where the SIM requests an action for a timer to be taken by the ME and the state of the timer does not allow that action.

- Interaction with call control by SIM, temporary problem. This is sent by the ME to indicate that call control modified the type of request indicated in the proactive command, and that the action requested by call control encounters a temporary problem.

[…]

6.11 Proactive commands versus possible Terminal response

The following table shows for each proactive command the possible terminal response returned (marked by a "•" character).

										Proactive Command			
		RE-FRESH	MORE TIME	POLL INTER-VAL	POLLING OFF	SETUP EVENT LIST	SET UP CALL	SEND SS	SEND USSD	SEND SMS	SEND DTMF	LAUNCH BROWSER	PLAY TONE
	Terminal response	'01'	'02'	'03'	'04'	'05'	'10'	'11'	'12'	'13'	'14'	'15'	'20'
'00'	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●	●
'01'	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●	●
'02'	Command performed, with missing info	●	●	●	●	●	●	●	●	●	●	●	●
'03'	REFRESH performed with additional EFs read	●											
'04'	Command performed succesfully, but requested icon could not be displayed						●	●	●	●	●		●
'05'	Command performed, but modified by call control by SIM.						●	●	●				
'06'	Command performed successfully, limited service												
'07'	Command performed with modification												
'10'	Proactive SIM session terminated by user						●				●		●
'11'	Backward move in the proactive SIM session requested by the user												
'12'	No response from user												
'13'	Help information required by the user												
'14'	USSD/SS Transact terminated by user						●	●	●				
'20'	ME currently unable to process command	●	●	●	●	●	●	●	●	●	●	●	●
'21'	Network currently unable to process command						●	●	●	●		●	
'22'	User did not accept the proactive command~~accept call setup request~~						●					●	
'23'	User cleared down call before connection or network release						●						
'24'	Action in contradiction with the current timer state												
'25'	Interaction with call control by SIM, temporary problem						●	●	●				
'26'	Launch Browser generic error											●	
'30'	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●	●
'31'	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●	●
'32'	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●	●
'33'	Command number not known by ME	●	●	●	●	●	●	●	●	●	●	●	●
'34'	SS Return Error						●	●					
'35'	SMS RPERROR									●			
'36'	Error, required values are missing	●	●	●	●	●	●	●	●	●	●		●
'37'	USSD return error								●				
'38'	Multiple Card command error												
'39'	Interaction with call control by SIM or MO SM control by SIM, permanent problem.						●	●	●	●			
'3A'	Bearer Independent Protocol error												

					Proactive Command							
		CARD APDU	POWER ON CARD	POWER OFF CARD	GET READ-ER STATUS	RUN AT COMM-AND	LANG NOTIFI CA TION	OPEN CHANNEL	CLOSE CHANNEL	RECEIVE DATA	SEND DATA	GET CHANNEL STATUS
	Terminal response	'30'	'31'	'32'	'33'	'34'	'35'	'40'	'41'	'42'	'43'	'44'
'00'	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●
'01'	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●
'02'	Command performed, with missing info	●	●	●	●	●	●	●	●	●	●	●
'03'	REFRESH performed with additional EFs read											
'04'	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●
'05'	Command performed, but modified by call control by SIM.											
'06'	Command performed successfully, limited service											
'07'	Command performed with modification							●				
'10'	Proactive SIM session terminated by user							●	●	●	●	●
'11'	Backward move in the proactive SIM session requested by the user											
'12'	No response from user											
'13'	Help information required by the user											
'14'	USSD/SS Transact terminated by user							●	●	●	●	●
'20'	ME currently unable to process command	●	●	●	●	●	●	●			●	
'21'	Network currently unable to process command							●				
'22'	User did not accept the proactive command~~accept call setup request~~							●				
'23'	User cleared down call before connection or network release											
'24'	Action in contradiction with the current timer state							●				
'25'	Interaction with call control by SIM, temporary problem							●	●	●	●	●
'26'	Launch Browser generic error											
'30'	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●
'31'	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●
'32'	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●
'33'	Command number not known by ME	●	●	●	●	●	●					
'34'	SS Return Error											
'35'	SMS RPERROR							●	●	●	●	●
'36'	Error, required values are missing	●	●	●	●	●	●					
'37'	USSD return error											
'38'	Multiple Card command error	●	●	●	●							
'39'	Interaction with call control by SIM or MO SM control by SIM, permanent problem								●	●	●	
'3A'	Bearer Independent Protocol error											

12.12 Result

Byte(s)	Description	Length
1	Result tag	1
2 to (Y-1)+2	Length (X)	Y
(Y-1)+3	General result	1
(Y-1)+4 to (Y-1)+X+2	Additional information on result	X-1

- General result

Contents: General result specifies the result and indicates appropriate SIM action:

Coding:
- '00' = Command performed successfully;
- '01' = Command performed with partial comprehension;
- '02' = Command performed, with missing information;
- '03' = REFRESH performed with additional EFs read;
- '04'= Command performed successfully, but requested icon could not be displayed;
- '05' = Command performed, but modified by call control by SIM;
- '06' = Command performed successfully, limited service;
- '07' = Command performed with modification (if class "e" is supported);
- '10' = Proactive SIM session terminated by the user;
- '11' = Backward move in the proactive SIM session requested by the user;
- '12' = No response from user;
- '13' = Help information required by the user;
- '14' = USSD or SS transaction terminated by the user.

Results '0X' and '1X' indicate that the command has been performed.
- '20' = ME currently unable to process command;
- '21' = Network currently unable to process command;
- '22' = User did not accept the proactive command~~accept call set-up request~~;
- '23' = User cleared down call before connection or network release;
- '24' = Action in contradiction with the current timer state;
- '25' = Interaction with call control by SIM, temporary problem;
- '26' = Launch browser generic error code;

Results '2X' indicate to the SIM that it may be worth re-trying the command at a later opportunity.
- '30' = Command beyond ME's capabilities;
- '31' = Command type not understood by ME;
- '32' = Command data not understood by ME;
- '33' = Command number not known by ME;
- '34' = SS Return Error;
- '35' = SMS RP-ERROR;
- '36' = Error, required values are missing;
- '37' = USSD Return Error;
- '38' = MultipleCard commands error, if class "a" is supported;
- '39' = Interaction with call control by SIM or MO short message control by SIM, permanent problem;
- '3A' = Bearer Independent Protocol error (if class "e" is supported).

Results '3X' indicate that it is not worth the SIM re-trying with an identical command, as it will only get the same response. However, the decision to retry lies with the SIM application.

The SIM application should avoid a rapid sequence of repeated retried commands as this may be detrimental to ME performance.

All other values are reserved.

- Additional information

Contents: For the general result "Command performed successfully", some proactive commands require additional information in the command result. This is defined in the subclauses below. For the general results '20', '21', '26', '34', '35', '37', '38' and '39' and '3A', it is mandatory for the ME to provide a specific cause value as additional information, as defined in the subclauses below. For the other general results, the ME may optionally supply additional information. If additional information is not supplied, then the length of the value part of the data object need only contain the general result.

12.12.1 Additional information for SEND SS

When the ME issues a successful COMMAND RESULT for a SEND SS proactive command, it shall also include the Operation Code and Parameters included in the Return Result component from the network, as additional information.

The first byte of the additional information shall be the SS Return Result Operation code, as defined in GSM 04.80 [10].

The rest of the additional information shall be the SS Return Result Parameters, as defined in GSM 04.80 [10].

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000634

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

11.14	CR	A193	Current Version:	8.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG-T #10 *list expected approval meeting # here ↑*

for approval [X] for information [ ]

strategic [ ] non-strategic [ ] *(for SMG use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 2000-11-14

Subject: General Clarification and Correction to GSM11.14

Work item: SIM Application Toolkit

Category: *(only one category shall be marked with an X)*

F	Correction	[X]
A	Corresponds to a correction in an earlier release	[ ]
B	Addition of feature	[ ]
C	Functional modification of feature	[ ]
D	Editorial modification	[ ]

Release:

Phase 2	[ ]
Release 96	[ ]
Release 97	[ ]
Release 98	[ ]
Release 99	[X]
Release 00	[ ]

Reason for change:

It is stated in the PLAY TONE command (see section 6.4.5), that a icon may be used, but there is no icon identifier data object in the structure of the PLAY TONE command (see section 6.6.5).
In order to be in line in between both sections, there is a need to correct the structure of the PLAY TONE Command.

The “Provisioning File Reference” data object should be written more precisely in order to avoid any misunderstanding.

During the creation of LAUNCH BROWSER features, a Browser Termination event has been defined in order to inform the SIM card when the browser is terminated. Unfortunately this event has not been defined in Annex G.
It is suggested to report this event by the mobile each time it occurs.

Clauses affected: 6.6.5 - 6.6.26 – Annex G

Other specs Affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

6.6.5 PLAY TONE

Description	Section	M/O	Min	Length
Proactive SIM command Tag	13.2	M	Y	1
Length (A+B+C+D+E+F)	-	M	Y	1 or 2
Command details	12.6	M	Y	A
Device identities	12.7	M	Y	B
Alpha identifier	12.2	O	N	C
Tone	12.16	O	N	D
Duration	12.8	O	N	E
Icon identifier	12.31	O	N	F

Tone
Contents: the standard supervisory tone or proprietary ME tone that the ME shall generate, either on its own or on top of the downlink audio path. If no tone is specified, then the ME shall default to "general beep".

NOTE: Some supervisory tones are optional for mobile equipment (see GSM 02.40 [18]).

- Duration
Contents: the length of time for which the ME shall generate the tone, if the tone is continuous or repeatable. For single tones, the value of this data object shall be ignored by the ME. If no duration is specified, the ME shall default to a duration determined by the ME manufacturer.

[…]

6.6.26 LAUNCH BROWSER

Description	Section	M/O	Min	Length
Proactive SIM command Tag	13.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G)	-	M	Y	1 or 2
Command details	12.6	M	Y	A
Device Identities	12.7	M	Y	B
Browser Identity	12.47	O	N	C
URL	12.48	M	Y	D
Bearer	12.49	O	N	E
Provisioning File Reference 1	12.50	O	N	F1
Provisioning File Reference 2	12.50	O	N	F2
…	12.50	O	N	Fx
Provisioning File Reference N	12.50	O	N	FN
Text String (Gateway/Proxy Identity)	12.15	O	N	G
Alpha identifier (user confirmation phase)	12.2	O	N	H
Icon identifier (user confirmation phase)	12.31	O	N	I

[…]

Annex G (informative): Monitoring of events

Some of the events monitored through the event download mechanism are reported by the mobile each time the event occurs, while other events are reported only once (the ME removes the event type from the current event list once the event occurs). This is summarised in the table below:

Event	Continuously reported	Reported once
MT call	X	
Call connected	X	
Call disconnected	X	
Location status	X	
User activity		X
Idle screen available		X
Card reader status (for class "a" only)	X	
Language selection	X	
Data available (for class "e" only)	X	
Channel status (for class "e" only)	X	
Browser termination (for class "c" only)	X	

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000570

CR-Form-v3

CHANGE REQUEST

⌘ **31.111** **CR** **012** ⌘ rev **-** ⌘ Current version: **3.2.0** ⌘

*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 [X] ME/UE [X] Radio Access Network [ ] Core Network [ ]

Title:	⌘	Get Reader Status - correction to card identifier tag
Source:	⌘	TSG-T3
Work item code:	⌘	***Date:*** ⌘ 13/11/00
Category:	⌘	**F** ***Release:*** ⌘ R99

Use one of the following categories:
- ***F*** *(essential correction)*
- ***A*** *(corresponds to a correction in an earlier release)*
- ***B*** *(Addition of feature),*
- ***C*** *(Functional modification of feature)*
- ***D*** *(Editorial modification)*

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
REL-4	*(Release 4)*
REL-5	*(Release 5)*

Reason for change:	⌘	To align 31.111 V3.2.0 with GSM 11.14, echoing an approved CR to 11.14
Summary of change:	⌘	Change of card reader identifier coding
Consequences if not approved:	⌘	Mis-alignment with GSM 11.14

Clauses affected:	⌘	6.8, 8.57, 10		
Other specs affected:	⌘	[X] Other core specifications	⌘	31.111 CR 013 for rel-4
		[ ] Test specifications		
		[ ] O&M Specifications		
Other comments:	⌘			

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://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.

6.8 Structure of TERMINAL RESPONSE

Direction: ME to UICC.

The command header is specified in TS 31.101 [13]. Length (A+B+ … +V) is indicated by P3 of the header.

Command parameters/data.

Description	Subclause	M/O/C	Min	Length
Command details	8.6	M	Y	A
Device identities	8.7	M	N	B
Result	8.12	M	Y	C
Duration (only required in response to a POLL INTERVAL proactive command)	8.8	C	N	D
Text string (only required in response to a GET INKEY or GET INPUT or SEND USSD proactive command)	8.15	C	N	E
Item identifier (only required in response to SELECT ITEM proactive command)	8.10	C	N	F
Local information (only required in response to PROVIDE LOCAL INFORMATION proactive command)	8.19, 8.20, 8.22, 8.29, 8.39, 8.45, 8.46	C	N	G
Call control requested action (only required if call control by USIM has modified a proactive command SET UP CALL, SEND SS or SEND USSD in another type of request).	8.30	C	N	H
Result data object 2 (only required if call control by USIM has modified a proactive command SET UP CALL, SEND SS or SEND USSD in another type of request).	8.12	C	N	I
Card reader status (only required in response to GET READER STATUS command). According to the requested information, one Card reader status object for each card interface reported, or one Card reader identifier object is required ~~for each card interface reported~~.	8.33~~2~~, 8.57	C	N	J_0 + … + J_n or J
Card ATR (only required in response to POWER ON CARD).	8.33	C	N	K
R-APDU (only required in response to PERFORM CARD APDU).	8.36	C	N	L
Timer identifier (only required in response to a TIMER MANAGEMENT proactive command)	8.37	C	N	M
Timer value (only required in response to a TIMER MANAGEMENT proactive command)	8.38	C	N	N
AT Response (only required in response to RUN AT COMMAND proactive command)	8.41	C	N	P
Text string2 (only required if call control by USIM has modified the proactive command SET UP CALL or SEND SS into a USSD request)	8.15	C	N	Q
Channel data (only required in response to RECEIVE DATA)	8.54	C	N	R
Channel status (only required in response to GET CHANNEL STATUS or OPEN CHANNEL proactive command)	8.56	C	N	S_0 + … + S_n
Channel data length (only required in response to RECEIVE DATA or SEND DATA proactive command)	8.54	C	N	T

Description	Subclause	M/O/C	Min	Length
Bearer description (only required in response to OPEN CHANNEL proactive command)	8.52	C	N	U
Buffer size (only required in response to OPEN CHANNEL proactive command)	8.55	C	N	V

Under no circumstances shall the UICC wait indefinitely for a TERMINAL RESPONSE.

For all the Conditional (C) SIMPLE-TLV objects, the ME should not include them in the response to non-applicable situations. However, if one is present, the UICC shall ignore it.

For all SIMPLE-TLV objects with Min=N, the ME should set the CR flag to comprehension not required. Any future additional SIMPLE-TLV objects will be included as Min = N and comprehension not required. This will ensure that any proactive command will end in a predictable way.

Response parameters/data: None.

8.57 Card reader identifier

Byte(s)	Description	Length
1	Card reader identifier tag	1
2	Length (X)	1
~~3~~	~~Identity of card reader~~	~~1~~
34 to (X+32)	Identifier of card reader	X

~~Coding:~~

~~the value of byte 3 indicates the identity of the card reader:~~

~~bits 1-3 = identity of card reader.~~

~~bits 4 to 8 = RFU.~~

~~Identity of card reader:~~

~~contents:~~

~~this contains the identity of the card reader, as used in Device Identities.~~

~~coding:~~

~~the value of byte 3 indicates the identity of the card reader:~~

~~bits 1-3 = identity of card reader.~~

~~bits 4 to 8 = RFU.~~

~~Identifier of card reader:~~

~~contents:~~

~~this contains manufacturer-specific information to identify the type of card reader being used.~~

- coding:
  - the identifier of card reader is coded in hexadecimal.

10 Allowed Type of command and Device identity combinations

Only certain types of commands can be issued with certain device identities. These are defined below.

Command description	Source	Destination
CALL CONTROL	ME	UICC
CELL BROADCAST DOWNLOAD	Network	UICC
COMMAND RESULT	ME	UICC
DISPLAY TEXT	UICC	Display
EVENT DOWNLOAD		
- MT call	Network	UICC
- Call connected at near end (MT call)	ME	UICC
- Call connected at far end (MO call)	Network	UICC
- Call disconnected at near end	ME	UICC
- Call disconnected at far end	Network	UICC
- Location status	ME	UICC
- User activity	ME	UICC
- Idle screen available	Display	UICC
- Card reader status	ME	UICC
- language selection	ME	UICC
- data available	ME	UICC
- channel status	ME	UICC
GET INKEY	UICC	ME
GET INPUT	UICC	ME
GET READER STATUS	~~UICC~~	~~ME or Card reader x~~
- if card reader status requested	UICC	ME
- if card reader identifier requested	UICC	card reader x
LANGUAGE NOTIFICATION	UICC	ME
LAUNCH BROWSER	UICC	ME
MENU SELECTION	Keypad	UICC
MO SHORT MESSAGE CONTROL	ME	UICC
MORE TIME	UICC	ME
PERFORM CARD APDU	UICC	Card reader x
PLAY TONE	UICC	Earpiece (see note)
POLLING OFF	UICC	ME
POLL INTERVAL	UICC	ME
POWER ON CARD	UICC	Card reader x
POWER OFF CARD	UICC	Card reader x
PROFILE DOWNLOAD	ME	UICC
PROVIDE LOCAL INFORMATION	UICC	ME
REFRESH	UICC	ME
RUN AT COMMAND	UICC	ME
SELECT ITEM	UICC	ME
SEND DTMF	UICC	Network
SEND SHORT MESSAGE	UICC	Network
SEND SS	UICC	Network
SEND USSD	UICC	Network
SET UP CALL	UICC	Network
SET UP EVENT LIST	UICC	ME
SET UP IDLE MODE TEXT	UICC	ME
SET UP MENU	UICC	ME
SMS-PP DOWNLOAD	Network	UICC
TIMER MANAGEMENT	UICC	ME
TIMER EXPIRATION	ME	UICC
OPEN CHANNEL	UICC	ME
CLOSE CHANNEL	UICC	Channel x
RECEIVE DATA	UICC	Channel x
SEND DATA	UICC	Channel x
GET CHANNEL STATUS	UICC	ME
NOTE: The ME may route the tone to other loudspeakers (external ringer, car kit) if more appropriate.		

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000571

CR-Form-v3

CHANGE REQUEST

⌘ **31.111** **CR** **013** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*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 [X] ME/UE [X] Radio Access Network [ ] Core Network [ ]

Title:	⌘	Get Reader Status - correction to card identifier tag
Source:	⌘	TSG-T3
Work item code:	⌘	***Date:*** ⌘ 13/11/00
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:	⌘	To align 31.111 V3.2.0 with GSM 11.14, echoing an approved CR to 11.14
Summary of change:	⌘	Change of card reader identifier coding
Consequences if not approved:	⌘	Mis-alignment with GSM 11.14

Clauses affected:	⌘	6.8, 8.57, 10		
Other specs affected:	⌘	[X] Other core specifications [ ] Test specifications [ ] O&M Specifications	⌘	31.111 CR 012 for R99
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.

6.8 Structure of TERMINAL RESPONSE

Direction: ME to UICC.

The command header is specified in TS 31.101 [13]. Length (A+B+ … +V) is indicated by P3 of the header.

Command parameters/data.

Description	Subclause	M/O/C	Min	Length
Command details	8.6	M	Y	A
Device identities	8.7	M	N	B
Result	8.12	M	Y	C
Duration (only required in response to a POLL INTERVAL proactive command)	8.8	C	N	D
Text string (only required in response to a GET INKEY or GET INPUT or SEND USSD proactive command)	8.15	C	N	E
Item identifier (only required in response to SELECT ITEM proactive command)	8.10	C	N	F
Local information (only required in response to PROVIDE LOCAL INFORMATION proactive command)	8.19, 8.20, 8.22, 8.29, 8.39, 8.45, 8.46	C	N	G
Call control requested action (only required if call control by USIM has modified a proactive command SET UP CALL, SEND SS or SEND USSD in another type of request).	8.30	C	N	H
Result data object 2 (only required if call control by USIM has modified a proactive command SET UP CALL, SEND SS or SEND USSD in another type of request).	8.12	C	N	I
Card reader status (only required in response to GET READER STATUS command). According to the requested information, one Card reader status object for each card interface reported, or one Card reader identifier object is required ~~for each card interface reported~~.	8.33~~2~~, 8.57	C	N	J_0 + … + J_n or J
Card ATR (only required in response to POWER ON CARD).	8.33	C	N	K
R-APDU (only required in response to PERFORM CARD APDU).	8.36	C	N	L
Timer identifier (only required in response to a TIMER MANAGEMENT proactive command)	8.37	C	N	M
Timer value (only required in response to a TIMER MANAGEMENT proactive command)	8.38	C	N	N
AT Response (only required in response to RUN AT COMMAND proactive command)	8.41	C	N	P
Text string2 (only required if call control by USIM has modified the proactive command SET UP CALL or SEND SS into a USSD request)	8.15	C	N	Q
Channel data (only required in response to RECEIVE DATA)	8.54	C	N	R
Channel status (only required in response to GET CHANNEL STATUS or OPEN CHANNEL proactive command)	8.56	C	N	S_0 + … + S_n
Channel data length (only required in response to RECEIVE DATA or SEND DATA proactive command)	8.54	C	N	T

Description	Subclause	M/O/C	Min	Length
Bearer description (only required in response to OPEN CHANNEL proactive command)	8.52	C	N	U
Buffer size (only required in response to OPEN CHANNEL proactive command)	8.55	C	N	V

Under no circumstances shall the UICC wait indefinitely for a TERMINAL RESPONSE.

For all the Conditional (C) SIMPLE-TLV objects, the ME should not include them in the response to non-applicable situations. However, if one is present, the UICC shall ignore it.

For all SIMPLE-TLV objects with Min=N, the ME should set the CR flag to comprehension not required. Any future additional SIMPLE-TLV objects will be included as Min = N and comprehension not required. This will ensure that any proactive command will end in a predictable way.

Response parameters/data: None.

8.57 Card reader identifier

Byte(s)	Description	Length
1	Card reader identifier tag	1
2	Length (X)	1
~~3~~	~~Identity of card reader~~	~~1~~
34 to (X+32)	Identifier of card reader	X

~~Coding:~~

~~the value of byte 3 indicates the identity of the card reader:~~

~~bits 1-3 = identity of card reader.~~

~~bits 4 to 8 = RFU.~~

~~Identity of card reader:~~

~~contents:~~

~~this contains the identity of the card reader, as used in Device Identities.~~

~~coding:~~

~~the value of byte 3 indicates the identity of the card reader:~~

~~bits 1-3 = identity of card reader.~~

~~bits 4 to 8 = RFU.~~

~~Identifier of card reader:~~

~~contents:~~

~~this contains manufacturer-specific information to identify the type of card reader being used.~~

- coding:
  - the identifier of card reader is coded in hexadecimal.

10 Allowed Type of command and Device identity combinations

Only certain types of commands can be issued with certain device identities. These are defined below.

Command description	Source	Destination
CALL CONTROL	ME	UICC
CELL BROADCAST DOWNLOAD	Network	UICC
COMMAND RESULT	ME	UICC
DISPLAY TEXT	UICC	Display
EVENT DOWNLOAD		
- MT call	Network	UICC
- Call connected at near end (MT call)	ME	UICC
- Call connected at far end (MO call)	Network	UICC
- Call disconnected at near end	ME	UICC
- Call disconnected at far end	Network	UICC
- Location status	ME	UICC
- User activity	ME	UICC
- Idle screen available	Display	UICC
- Card reader status	ME	UICC
- language selection	ME	UICC
- data available	ME	UICC
- channel status	ME	UICC
GET INKEY	UICC	ME
GET INPUT	UICC	ME
GET READER STATUS	~~UICC~~	~~ME or Card reader x~~
- if card reader status requested	UICC	ME
- if card reader identifier requested	UICC	card reader x
LANGUAGE NOTIFICATION	UICC	ME
LAUNCH BROWSER	UICC	ME
MENU SELECTION	Keypad	UICC
MO SHORT MESSAGE CONTROL	ME	UICC
MORE TIME	UICC	ME
PERFORM CARD APDU	UICC	Card reader x
PLAY TONE	UICC	Earpiece (see note)
POLLING OFF	UICC	ME
POLL INTERVAL	UICC	ME
POWER ON CARD	UICC	Card reader x
POWER OFF CARD	UICC	Card reader x
PROFILE DOWNLOAD	ME	UICC
PROVIDE LOCAL INFORMATION	UICC	ME
REFRESH	UICC	ME
RUN AT COMMAND	UICC	ME
SELECT ITEM	UICC	ME
SEND DTMF	UICC	Network
SEND SHORT MESSAGE	UICC	Network
SEND SS	UICC	Network
SEND USSD	UICC	Network
SET UP CALL	UICC	Network
SET UP EVENT LIST	UICC	ME
SET UP IDLE MODE TEXT	UICC	ME
SET UP MENU	UICC	ME
SMS-PP DOWNLOAD	Network	UICC
TIMER MANAGEMENT	UICC	ME
TIMER EXPIRATION	ME	UICC
OPEN CHANNEL	UICC	ME
CLOSE CHANNEL	UICC	Channel x
RECEIVE DATA	UICC	Channel x
SEND DATA	UICC	Channel x
GET CHANNEL STATUS	UICC	ME
NOTE: The ME may route the tone to other loudspeakers (external ringer, car kit) if more appropriate.		

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000623
(revised version of T3-000601)

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

3G 31.111	**CR**	**014**	Current Version:	4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source: T3 **Date:** 2000-11-14

Subject: New event for display parameters

Work item: USAT

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature	X		Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Rel-4	X

Reason for change: Graphical parameters have been introduced in the TS 31.111 to enable the USIM to fit applications with the current mobile screen. As some handsets are able to resize their screen dynamically, a new event should be added to inform the USIM about the new ME screen parameters and take the opportunity to re-design dynamically the USAT application in accordance with the new graphical parameters.

Clauses affected: 4.7 – 5.2 – 7.5.13(New) – 8.25 – 8.62 (New) – 10 – Annex F

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

4.7 Event download

A set of events to monitor for is supplied by the UICC in a proactive UICC command. The event download mechanism is used to transfer details of the event to the UICC, when it occurs. Events that the ME can report to the UICC include incoming calls, location status, access technology, display parameters changed , and availability of the screen for applications.

[…]

5 Profile download

5.1 Procedure

The profile download instruction is sent by the ME to the UICC as part of the UICC initialization procedure. This procedure is specified in TS 31.101 [13]. The profile sent by the ME shall state the facilities relevant to USAT that are supported by the ME.

This procedure is important, as it is by this that the UICC knows what the ME is capable of, and the UICC can then limit its instruction range accordingly. If no command is sent by the ME, the UICC shall assume that the ME does not support USAT.

5.2 Structure and coding of TERMINAL PROFILE

Direction: ME to UICC.

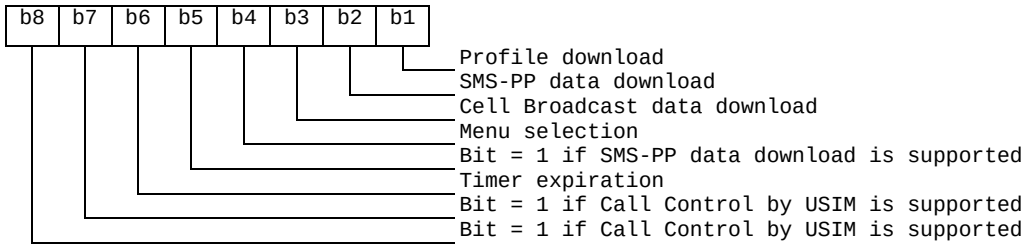
The command header is specified in TS 31.101 [13].

Command parameters/data:

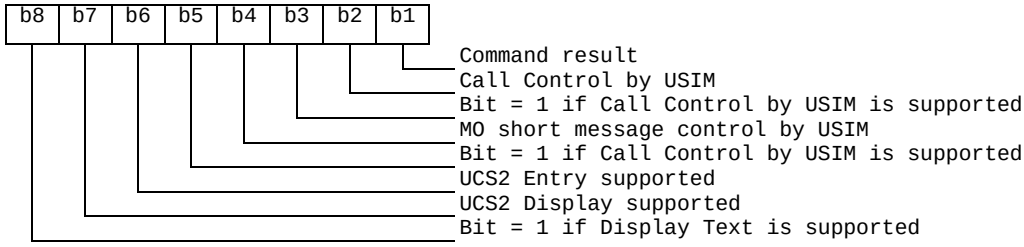
Description	Subclause	M/O/C	Length
Profile	-	M	lgth

- Profile:
  Contents: The list of USAT facilities that are supported by the ME.
  Coding:
  1 bit is used to code each facility:
  bit = 1: facility supported by ME
  bit = 0: facility not supported by ME

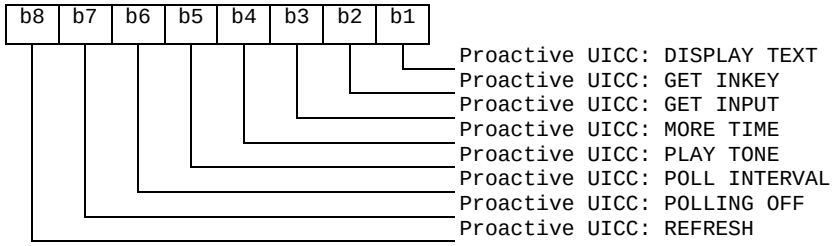
  First byte (Download):



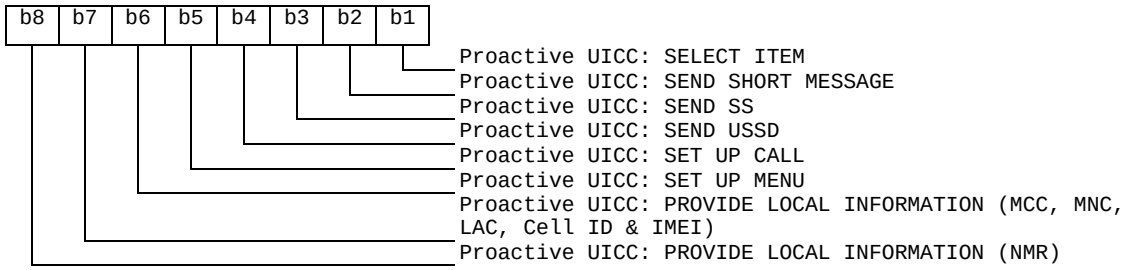
Second byte (Other):



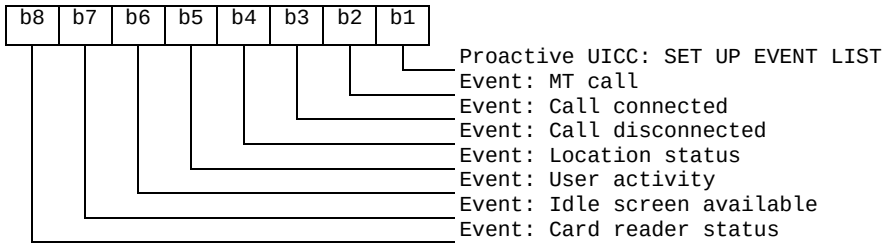
Third byte (Proactive UICC):



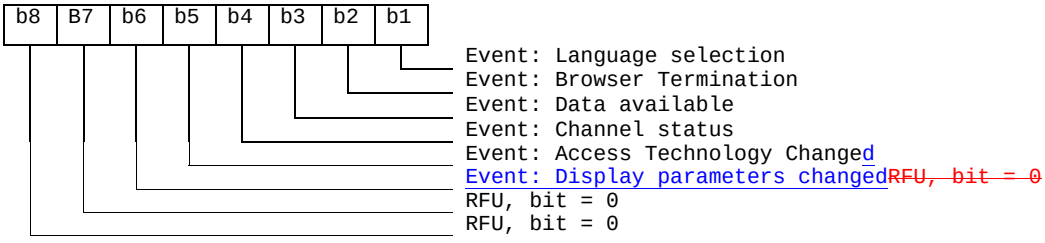
Fourth byte (Proactive UICC):



Fifth byte (Event driven information):



Sixth byte (Event driven information extensions):



[…]

7.5.13 Display parameters changed event

7.5.13.1 Procedure

If the display parameters changed event is part of the current event list (as set up by the last SET UP EVENT LIST command, see section 6.4.16), then when the screen of the ME is resized, the ME shall inform the UICC that this has occured, by using the ENVELOPE (EVENT DOWNLOAD – Display parameters changed) command as defined below.

7.5.13.2 Structure of ENVELOPE (EVENT DOWNLOAD – Display parameters changed)

Direction: ME to UICC.

The command header is specified in TS 31.101 [13].

Command parameters/data.

Description	Subclause	M/O	Min	Length
Event download tag	9.1	M	Y	1
Length (A+B+C)	-	M	Y	1 or 2
Event list	8.25	M	Y	A
Device identities	8.7	M	Y	B
Display Parameters	8.62	M	Y	C

- Event list: the Event list data object shall contain only one event (value part of length 1 byte), and ME shall set the event to:
  - Display parameters changed
- Device identities: the ME shall set the device identities to:
  - source: ME;
  - destination: UICC.
- Display parameters changed: this data object shall contain the current ME's screen parameters

Response parameters/data: None for this type of ENVELOPE command.

[…]

8.25 Event list

Byte(s)	Description	Length
1	Event list tag	1
2 to Y+1	Length (X) of bytes following	Y
Y+2 to X+Y+1	Event list	X

- Event list:
  - contents: A list of events, of variable length. Each byte in the list defines an event. Each event type shall not appear more than once within the list;
  - coding: Each byte in the event list shall be coded with one of the values below:
    - '00' = MT call;

- '01' = Call connected;
- '02' = Call disconnected;
- '03' = Location status;
- '04' = User activity;
- '05' = Idle screen available;
- '06' = Card reader status;
- '07' = Language selection;
- '08' = Browser termination;
- '09' = Data available;
- '0A' = Channel status;
- '0B' = Access Technology Change;
- '0C' = Display parameters changed.

[…]

8.62 Display parameters changed

Byte(s)	Description	Length
1	Display parameters tag	1
2	Length (X) of bytes following	1
3	Parameters list	1

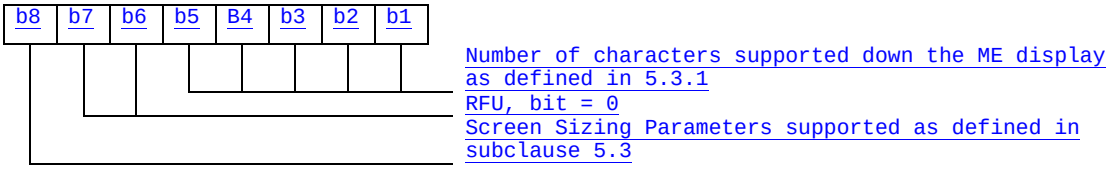
- Parameters list

Contents: A list of different information regarding the ME's screen.

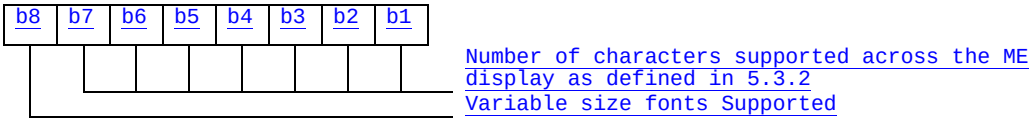
Coding:

1 bit is used to code parameters supported or not :
bit = 1: parameters supported by ME
bit = 0: parameters not supported by ME

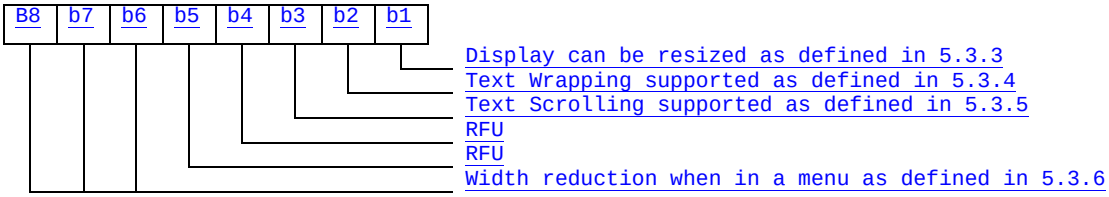
First byte: (Screen height)



Second byte: (Screen width)



Third byte: (Screen effects)



10 Allowed Type of command and Device identity combinations

Only certain types of commands can be issued with certain device identities. These are defined below.

Command description	Source	Destination
CALL CONTROL	ME	UICC
CELL BROADCAST DOWNLOAD	Network	UICC
COMMAND RESULT	ME	UICC
DISPLAY TEXT	UICC	Display
EVENT DOWNLOAD		
- MT call	Network	UICC
- Call connected at near end (MT call)	ME	UICC
- Call connected at far end (MO call)	Network	UICC
- Call disconnected at near end	ME	UICC
- Call disconnected at far end	Network	UICC
- Location status	ME	UICC
- User activity	ME	UICC
- Idle screen available	Display	UICC
- Card reader status	ME	UICC
- language selection	ME	UICC
- data available	ME	UICC
- channel status	ME	UICC
- access Technology Change	ME	UICC
- display parameters changed	ME	UICC
GET INKEY	UICC	ME
GET INPUT	UICC	ME
GET READER STATUS	UICC	ME or Card reader x
LANGUAGE NOTIFICATION	UICC	ME
LAUNCH BROWSER	UICC	ME
MENU SELECTION	Keypad	UICC
MO SHORT MESSAGE CONTROL	ME	UICC
MORE TIME	UICC	ME
PERFORM CARD APDU	UICC	Card reader x
PLAY TONE	UICC	Earpiece (see note)
POLLING OFF	UICC	ME
POLL INTERVAL	UICC	ME
POWER ON CARD	UICC	Card reader x
POWER OFF CARD	UICC	Card reader x
PROFILE DOWNLOAD	ME	UICC
PROVIDE LOCAL INFORMATION	UICC	ME
REFRESH	UICC	ME
RUN AT COMMAND	UICC	ME
SELECT ITEM	UICC	ME
SEND DTMF	UICC	Network
SEND SHORT MESSAGE	UICC	Network
SEND SS	UICC	Network
SEND USSD	UICC	Network
SET UP CALL	UICC	Network
SET UP EVENT LIST	UICC	ME
SET UP IDLE MODE TEXT	UICC	ME
SET UP MENU	UICC	ME
SMS-PP DOWNLOAD	Network	UICC
TIMER MANAGEMENT	UICC	ME
TIMER EXPIRATION	ME	UICC
OPEN CHANNEL	UICC	ME
CLOSE CHANNEL	UICC	Channel x
RECEIVE DATA	UICC	Channel x
SEND DATA	UICC	Channel x
GET CHANNEL STATUS	UICC	ME
NOTE: The ME may route the tone to other loudspeakers (external ringer, car kit) if more appropriate.		

Annex F (informative): Monitoring of events

Some of the events monitored through the event download mechanism are reported by the mobile each time the event occurs, while other events are reported only once (the ME removes the event type from the current event list once the event occurs). This is summarised in the table below.

Event	Continuously reported	Reported once
MT call	X	
Call connected	X	
Call disconnected	X	
Location status	X	
User activity		X
Idle screen available		X
Card reader status	X	
Language selection	X	
Data available	X	
Channel status	X	
Access Technology Change	X	
Display parameters changed	X	

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000635

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

31.111	**CR**	**015**	Current Version:	3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14

Subject:	General Clarification and Correction to TS 31.111

Work item:	USAT

Category: *(only one category shall be marked with an X)*				**Release:**	
	F	Correction	X	Phase 2	
	A	Corresponds to a correction in an earlier release		Release 96	
	B	Addition of feature		Release 97	
	C	Functional modification of feature		Release 98	
	D	Editorial modification		Release 99	X
				Release 00	

Reason for change:

It is stated in the PLAY TONE command (see section 6.4.5), that a icon may be used, but there is no icon identifier data object in the structure of the PLAY TONE command (see section 6.6.5).
In order to be in line in between both sections, there is a need to correct the structure of the PLAY TONE Command.

The “Provisioning File Reference” data object should be written more precisely in order to avoid any misunderstanding.

During the creation of LAUNCH BROWSER features, a Browser Termination event has been defined in order to inform the SIM card when the browser is terminated. Unfortunately this event has not been defined in Annex F.
It is suggested to report this event by the mobile each time it occurs.

Clauses affected:	6.6.5 - 6.6.26 – Annex F

Other specs affected:			
	Other 3G core specifications		→ List of CRs:
	Other GSM core specifications		→ List of CRs:
	MS test specifications		→ List of CRs:
	BSS test specifications		→ List of CRs:
	O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

6.6.5 PLAY TONE

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Tone	8.16	O	N	D
Duration	8.8	O	N	E
Icon identifier	8.31	O	N	F

- Tone:

  - Contents: the standard supervisory tone or proprietary ME tone that the ME shall generate, either on its own or on top of the downlink audio path. If no tone is specified, then the ME shall default to "general beep".

NOTE: Some supervisory tones are optional for mobile equipment (see GSM 02.40 [22]).

- Duration:

- Contents: the length of time for which the ME shall generate the tone, if the tone is continuous or repeatable. For single tones, the value of this data object shall be ignored by the ME. If no duration is specified, the ME shall default to a duration determined by the ME manufacturer.

[…]

6.6.26 LAUNCH BROWSER

Description	Subclause	M/O	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device Identities	8.7	M	Y	B
Browser Identity	8.47	O	N	C
URL	8.48	M	Y	D
Bearer	8.49	O	N	E
Provisioning File Reference 1	8.50	O	N	F1
Provisioning File Reference 2	8.50	O	N	F2
…..	8.50	O	N	Fx
Provisioning File Reference N	8.50	O	N	FN
Text String (Gateway/Proxy Identity)	8.15	O	N	G
Alpha identifier (user confirmation phase)	8.2	O	N	H
Icon identifier (user confirmation phase)	8.31	O	N	I

[…]

Annex F (informative): Monitoring of events

Some of the events monitored through the event download mechanism are reported by the mobile each time the event occurs, while other events are reported only once (the ME removes the event type from the current event list once the event occurs). This is summarised in the table below.

Event	Continuously reported	Reported once
MT call	X	
Call connected	X	
Call disconnected	X	
Location status	X	
User activity		X
Idle screen available		X
Card reader status	X	
Language selection	X	
Data available	X	
Channel status	X	
Browser termination	X	

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000636

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

31.111	CR	016	Current Version:	4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14

Subject:	General Clarification and Correction to TS 31.111

Work item:	USAT

Category: *(only one category shall be marked with an X)*			**Release:**	
F	Correction		Phase 2	
A	Corresponds to a correction in an earlier release	X	Release 96	
B	Addition of feature		Release 97	
C	Functional modification of feature		Release 98	
D	Editorial modification		Release 99	
			Release 00	X

Reason for change:	It is stated in the PLAY TONE command (see section 6.4.5), that a icon may be used, but there is no icon identifier data object in the structure of the PLAY TONE command (see section 6.6.5). In order to be in line in between both sections, there is a need to correct the structure of the PLAY TONE Command. The “Provisioning File Reference” data object should be written more precisely in order to avoid any misunderstanding. During the creation of LAUNCH BROWSER features, a Browser Termination event has been defined in order to inform the SIM card when the browser is terminated. Unfortunately this event has not been defined in Annex F. It is suggested to report this event by the mobile each time it occurs.

Clauses affected:	6.6.5 - 6.6.26 – Annex F

Other specs affected:				
	Other 3G core specifications		→ List of CRs:	
	Other GSM core specifications		→ List of CRs:	
	MS test specifications		→ List of CRs:	
	BSS test specifications		→ List of CRs:	
	O&M specifications		→ List of CRs:	

Other comments:	

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6.6.5 PLAY TONE

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Tone	8.16	O	N	D
Duration	8.8	O	N	E
Icon identifier	8.31	O	N	F

- Tone:

  - Contents: the standard supervisory tone or proprietary ME tone that the ME shall generate, either on its own or on top of the downlink audio path. If no tone is specified, then the ME shall default to "general beep".

NOTE: Some supervisory tones are optional for mobile equipment (see GSM 02.40 [22]).

- Duration:

- Contents: the length of time for which the ME shall generate the tone, if the tone is continuous or repeatable. For single tones, the value of this data object shall be ignored by the ME. If no duration is specified, the ME shall default to a duration determined by the ME manufacturer.

[…]

6.6.26 LAUNCH BROWSER

Description	Subclause	M/O	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device Identities	8.7	M	Y	B
Browser Identity	8.47	O	N	C
URL	8.48	M	Y	D
Bearer	8.49	O	N	E
Provisioning File Reference 1	8.50	O	N	F1
Provisioning File Reference 2	8.50	O	N	F2
…..	8.50	O	N	Fx
Provisioning File Reference N	8.50	O	N	FN
Text String (Gateway/Proxy Identity)	8.15	O	N	G
Alpha identifier (user confirmation phase)	8.2	O	N	H
Icon identifier (user confirmation phase)	8.31	O	N	I

[…]

Annex F (informative): Monitoring of events

Some of the events monitored through the event download mechanism are reported by the mobile each time the event occurs, while other events are reported only once (the ME removes the event type from the current event list once the event occurs). This is summarised in the table below.

Event	Continuously reported	Reported once
MT call	X	
Call connected	X	
Call disconnected	X	
Location status	X	
User activity		X
Idle screen available		X
Card reader status	X	
Language selection	X	
Data available	X	
Channel status	X	
Access Technology Change	X	
Browser termination	X	

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000637

CHANGE REQUEST

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31.111	**CR**	**017**	Current Version:	3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14

Subject:	Correction of LAUNCH BROWSER

Work item:	USAT

Category: *(only one category shall be marked with an X)*				**Release:**		
	F	Correction	X		Phase 2	
	A	Corresponds to a correction in an earlier release			Release 96	
	B	Addition of feature			Release 97	
	C	Functional modification of feature			Release 98	
	D	Editorial modification			Release 99	X
					Release 00	

Reason for change:	The way to launch the browser is defined by the command qualifier. Some values may lead to inconsistencies in between the browser configuration data provided by “Gateway/Proxy ID” or “Provisioning File Reference” data objects . The bearer data object in the LAUNCH BROWSER has a sense only if the SAT application is aware of the Gateway used. If the Gateway/Proxy ID data object is not included in the proactive command, the bearer data object will be discarded.

Clauses affected:	6.6.26 - 8.6

Other specs affected:			
	Other 3G core specifications		→ List of CRs:
	Other GSM core specifications		→ List of CRs:
	MS test specifications		→ List of CRs:
	BSS test specifications		→ List of CRs:
	O&M specifications		→ List of CRs:

Other comments:	

help.doc

<--------- double-click here for help and instructions on how to create a CR.

6.6.26 LAUNCH BROWSER

Description	Subclause	M/O	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G+H+I)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device Identities	8.7	M	Y	B
Browser Identity	8.47	O	N	C
URL	8.48	M	Y	D
Bearer	8.49	O	N	E
Provisioning File Reference 1	8.50	O	N	F1
Provisioning File Reference 2	8.50	O	N	F2
Provisioning File Reference N	8.50	O	N	FN
Text String (Gateway/Proxy Identity)	8.15	O	N	G
Alpha identifier (user confirmation phase)	8.2	O	N	H
Icon identifier (user confirmation phase)	8.31	O	N	I

If the URL data object is provisioned the URL value shall take precedence over any other URL value.

If Provisioning File Reference data object is present in the command then it shall take precedence over Bearer and Proxy Identity. If several Provisioning File References are present in the same command the information in the first reference shall take precedence.

Gateway/Proxy Identity is a text string which gives to the mobile the name/identity of the Gateway/Proxy to be used for connecting to the URL. This Gateway/Proxy Identity is required when the bearer data object is present.

8.6 Command details

Byte(s)	Description	Length
1	Command details tag	1
2	Length = '03'	1
3	Command number	1
4	Type of command	1
5	Command Qualifier	1

- Command number
  - for contents and coding, see subclause 6.5.1.
- Type of command:
  - contents: The Type of Command specifies the required interpretation of the data objects which follow, and the required ME procedure;
  - coding:
    - see subclause 9.4;
    - the ME shall respond to reserved values (i.e. values not listed) with the result "Command type not understood".
- Command Qualifier:
  - contents: Qualifiers specific to the command;
  - coding:

    […]

    - LAUNCH BROWSER:

- '00' = launch browser ~~without making a connection~~, if not already launched;
- '01' = ~~launch browser, making a connection, if not already launched~~ not used;
- '02' = use the existing browser (the browser shall not use the active existing secured session);
- '03' = close the existing browser session and launch new browser session, ~~making a connection~~;
- '04' = ~~close the existing browser session and launch new browser session, using a secure session~~ not used;
- '05' to 'FF' = RFU.

The ME shall respond to reserved values with the result "Command type not understood".

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000638

CHANGE REQUEST

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31.111	**CR**	**018**	Current Version:	4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14

Subject:	Correction of LAUNCH BROWSER

Work item:	USAT

Category: *(only one category shall be marked with an X)*				**Release:**	
	F	Correction			Phase 2	
	A	Corresponds to a correction in an earlier release	X		Release 96	
	B	Addition of feature			Release 97	
	C	Functional modification of feature			Release 98	
	D	Editorial modification			Release 99	
					Release 00	X

Reason for change:	The way to launch the browser is defined by the command qualifier. Some values may lead to inconsistencies in between the browser configuration data provided by “Gateway/Proxy ID” or “Provisioning File Reference” data objects . The bearer data object in the LAUNCH BROWSER has a sense only if the SAT application is aware of the Gateway used. If the Gateway/Proxy ID data object is not included in the proactive command, the bearer data object will be discarded.

Clauses affected:	6.6.26 - 8.6

Other specs affected:			
Other 3G core specifications		→ List of CRs:	
Other GSM core specifications		→ List of CRs:	
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments:	

help.doc

<--------- double-click here for help and instructions on how to create a CR.

6.6.26 LAUNCH BROWSER

Description	Subclause	M/O	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F1+ F2+…+FN+G+H+I)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device Identities	8.7	M	Y	B
Browser Identity	8.47	O	N	C
URL	8.48	M	Y	D
Bearer	8.49	O	N	E
Provisioning File Reference 1	8.50	O	N	F1
Provisioning File Reference 2	8.50	O	N	F2
Provisioning File Reference N	8.50	O	N	FN
Text String (Gateway/Proxy Identity)	8.15	O	N	G
Alpha identifier (user confirmation phase)	8.2	O	N	H
Icon identifier (user confirmation phase)	8.31	O	N	I

If the URL data object is provisioned the URL value shall take precedence over any other URL value.

If Provisioning File Reference data object is present in the command then it shall take precedence over Bearer and Proxy Identity. If several Provisioning File References are present in the same command the information in the first reference shall take precedence.

Gateway/Proxy Identity is a text string which gives to the mobile the name/identity of the Gateway/Proxy to be used for connecting to the URL. This Gateway/Proxy Identity is required when the bearer data object is present.

8.6 Command details

Byte(s)	Description	Length
1	Command details tag	1
2	Length = '03'	1
3	Command number	1
4	Type of command	1
5	Command Qualifier	1

- Command number
  - for contents and coding, see subclause 6.5.1.
- Type of command:
  - contents: The Type of Command specifies the required interpretation of the data objects which follow, and the required ME procedure;
  - coding:
    - see subclause 9.4;
    - the ME shall respond to reserved values (i.e. values not listed) with the result "Command type not understood".
- Command Qualifier:
  - contents: Qualifiers specific to the command;
  - coding:

    […]

    - LAUNCH BROWSER:

- '00' = launch browser ~~without making a connection~~, if not already launched;
- '01' = ~~launch browser, making a connection, if not already launched~~ not used;
- '02' = use the existing browser (the browser shall not use the active existing secured session);
- '03' = close the existing browser session and launch new browser session, ~~making a connection~~;
- '04' = ~~close the existing browser session and launch new browser session, using a secure session~~ not used;
- '05' to 'FF' = RFU.

The ME shall respond to reserved values with the result "Command type not understood".

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000639

CHANGE REQUEST

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31.111	**CR**	**019**	Current Version:	3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM	X	ME	X	UTRAN / Radio		Core Network	

Source:	T3	**Date:**	2000-11-14

Subject:	Modification of general result for proactive commands with user confirmation

Work item:	USAT

Category: *(only one category shall be marked with an X)*				**Release:**		
	F	Correction	X		Phase 2	
	A	Corresponds to a correction in an earlier release			Release 96	
	B	Addition of feature			Release 97	
	C	Functional modification of feature			Release 98	
	D	Editorial modification			Release 99	X
					Release 00	

Reason for change:	When a proactive command includes a user confirmation, the user is requested to accept or refuse the command, the only result that the ME can provide to the SIM card is “User did not accept call set-up request”. The notion of “call set-up request” for the new command LAUNCH BROWSER / OPEN CHANNEL is no more correct following the bearer used. There is a need to modify the existing result in order to be more generic. The modification will not lead to a backward compatibility.

Clauses affected:	6.4.13- 6.4.27 – 6.7 - 6.11 - 8.12

Other specs affected:			
	Other 3G core specifications		→ List of CRs:
	Other GSM core specifications		→ List of CRs:
	MS test specifications		→ List of CRs:
	BSS test specifications		→ List of CRs:
	O&M specifications		→ List of CRs:

Other comments:	

help.doc

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6.4.13 SET UP CALL

[…]

- if the user accepts the call, the ME shall then set up a call to the destination address given in the response data, with the relevant capability configuration parameters and called party subaddress (if provided by the UICC);
- if the user does not accept the call, or rejects the call, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept the proactive command~~call set-up request~~). The operation is aborted;
- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with "Proactive UICC session terminated by the user" result value.
- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;
- once a CONNECT message has been received from the network (defined in 3G 24.008), the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE. Operation of the call then proceeds as normal.

If the first call set-up attempt is unsuccessful:

- if the UICC did not request redial then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not redial to set-up the call;
- if the UICC requested redial, then the ME may automatically redial the call (depending on its capability/configuration). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the call set-up has not been successful, and the ME is not going to perform any more redials, or the time elapsed since the first call set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the redial mechanism shall be terminated;
- if the user stops the call set-up attempt or the redial mechanism before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the call set-up details (called party number and associated parameters) sent by the UICC in this command.

[…]

6.4.27 OPEN CHANNEL

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to establish a link.

The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism. The ME shall attempt at least one link establishment set-up.

The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.

If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME informs the UICC of the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;

- if immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept ~~the proactive command call set-up request~~). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the ME is busy on another call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate link establishment is requested, the ME allocates buffers, sets up the link and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand link establishment is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;

- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

- if the user accepts the channel, the ME shall then set up a channel;

- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept the proactive command ~~call set-up request~~). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;

- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;

[…]

6.7 Command results

[…]

Temporary problems are further defined as:

- ME is currently unable to process the command. Specific causes for this are:
  - the screen is busy;
  - ME currently busy on a call;
  - ME currently busy on SEND DTMF operation;
  - ME currently busy on SS transaction;
  - ME currently busy on USSD operation;
  - no service is currently available;
  - access control class barred on serving network;
  - no radio resource currently available;
  - not in speech call;
  - no USIM active.
- if none of these can be made to apply, a "no cause can be given" value can be used;
- network is currently unable to process the command. Specific cause values are the cause values given by the network, as defined in 3G 24.008 [9];
- ~~the user did not accept the call set-up request. This is where the ME alerts the user before setting up a call, and the user either rejected or did not accept the "call";~~
- In some proactive commands the ME is required to solicit and receive approval of the user before executing the proactive command. In the case that the user does not give approval for the execution of the proactive command it is not executed by the ME and the terminal response “user did not accept the proactive command” is returned by the ME to the SIM.
- the user cleared down the call, before the call connected (CONNECT received from network, as defined in 3G 24.008 [9]) or before the network released the call;
- action in contradiction with the current timer state. This is where the UICC requests an action for a timer to be taken by the ME and the state of the timer does not allow that action;
- interaction with call control by UICC, temporary problem. This is sent by the ME to indicate that call control modified the type of request indicated in the proactive command, and that the action requested by call control encounters a temporary problem.

Permanent problems are further defined as:

- command is beyond ME's capabilities. This is sent by the ME when it understands what the UICC is asking it to do, but does not have the capability to do it, e.g. ME which only supports SMS asked to set up a call;

[…]

6.11 Proactive commands versus possible Terminal response

Table 6.1 shows for each proactive command the possible terminal response returned (marked by a "•" character).

Table 6.1: Proactive commands versus possible Terminal response (continued overleaf…)

		PROACTIVE COMMAND																			
	TERMINAL RESPONSE	RE-FRESH '01'	MORE TIME '02'	POLL INTER-VAL '03'	POLL-ING OFF '04'	SETUP EVENT LIST '05'	SET UP CALL '10'	SEND SS '11'	SEND USSD '12'	SEND SMS '13'	SEND DTMF '14'	LAUNC H BROW SER '15'	PLAY TONE '20'	DIS-PLAY TEXT '21'	GET INKEY '22'	GET INPUT '23'	SEL-ECT ITEM '24'	SET UP MENU '25'	PRO-VIDE LOCAL INFO '26'	TIMER MAN-AGE-MENT '27'	SETUP IDLE MODE TEXT '28'
00	Command performed successfully	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
01	Command performed with partial comprehension	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
02	Command performed, with missing information	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
03	REFRESH performed with additional EFs read	•																			
04	Command performed succesfully, but requested icon could not be displayed						•	•	•	•	•		•	•	•	•	•	•			
05	Command performed, but modified by call control by USIM						•	•	•												
06	Command performed successfully, limited service																		•		
07	Command performed with modification																				
08	REFRESH performed but indicated USIM was not active	•																			
10	Proactive UICC session terminated by the user						•				•		•	•	•	•	•				
11	Backward move in the proactive UICC session requested by the user													•	•	•	•				
12	No response from user													•	•	•	•				
13	Help information required by the user														•	•	•				
14	USSD or SS Transaction terminated by user						•	•	•												
20	ME currently unable to process command	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
21	Network currently unable to process command						•	•	•	•		•									
22	User did not accept the proactive command~~call setup request~~						•					•									
23	User cleared down call before connection or network release						•														
24	Action in contradiction with the current timer state																			•	
25	Interaction with call control by USIM, temporary problem						•	•	•												
26	Launch browser generic error											•									
30	Command beyond MEs capabilities	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
31	Command type not understood by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
32	Command data not understood by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
33	Command number not known by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
34	SS Return Error						•	•													
35	SMS RPERROR									•											
36	Error, required values are missing	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
37	USSD return error								•												
38	Multiple Card command error																				
39	Interaction with call/SM control by USIM, permanent problem						•	•	•	•											
3A	Bearer Independent Protocol error																				

Table 6.1: Proactive commands versus possible Terminal response

		PROACTIVE COMMAND													
	TERMINAL RESPONSE	CARD APDU '30'	POWER ON CARD '31'	POWER OFF CARD '32'	GET READ-ER STATUS '33'	RUN AT COMM-AND '34'	LANG NOTIFI CA TION '35'	OPEN CHANN EL '40'	CLOSE CHANN EL '41'	RECEIVE DATA '42'	SEND DATA '43'	GET CHANN EL STATUS '44'			
00	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●			
01	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●			
02	Command performed, with missing information	●	●	●	●	●	●	●	●	●	●	●			
03	REFRESH performed with additional EFs read														
04	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●			
05	Command performed, but modified by call control by USIM														
06	Command performed successfully, limited service														
07	Command performed with modification							●							
08	REFRESH performed but indicated USIM was not active							●							
10	Proactive UICC session terminated by the user							●	●	●	●	●			
11	Backward move in the proactive UICC session requested by the user														
12	No response from user														
13	Help information required by the user														
14	USSD or SS Transaction terminated by user							●	●	●	●	●			
20	ME currently unable to process command	●	●	●	●	●	●	●			●				
21	Network currently unable to process command							●							
22	User did not accept the proactive command~~call setup request~~							●							
23	User cleared down call before connection or network release														
24	Action in contradiction with the current timer state							●							
25	Interaction with call control by USIM, temporary problem							●	●	●	●	●			
26	Launch browser generic error														
30	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●			
31	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
32	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
33	Command number not known by ME	●	●	●	●	●	●								
34	SS Return Error														
35	SMS RPERROR							●	●	●	●	●			
36	Error, required values are missing	●	●	●	●	●	●								
37	USSD return error														
38	Multiple Card command error	●	●	●	●										
39	Interaction with call/SM control by USIM, permanent problem								●	●	●				
3A	Bearer Independent Protocol error														

8.12 Result

Byte(s)	Description	Length
1	Result tag	1
2 to (Y-1)+2	Length (X)	Y
(Y-1)+3	General result	1
(Y-1)+4 to (Y-1)+X+2	Additional information on result	X-1

- General result:
  - contents: General result specifies the result and indicates appropriate UICC action;
  - coding:
    - '00' = Command performed successfully;
    - '01' = Command performed with partial comprehension;
    - '02' = Command performed, with missing information;
    - '03' = REFRESH performed with additional EFs read;
    - '04' = Command performed successfully, but requested icon could not be displayed;
    - '05' = Command performed, but modified by call control by USIM;
    - '06' = Command performed successfully, limited service;
    - '07' = Command performed with modification;
    - '08' = REFRESH performed but indicated USIM was not active;
    - '10' = Proactive UICC session terminated by the user;
    - '11' = Backward move in the proactive UICC session requested by the user;
    - '12' = No response from user;
    - '13' = Help information required by the user;
    - '14' = USSD or SS transaction terminated by the user.
  - results '0X' and '1X' indicate that the command has been performed:
    - '20' = ME currently unable to process command;
    - '21' = Network currently unable to process command;
    - '22' = User did not accept the proactive command ~~call set-up request;~~
    - '23' = User cleared down call before connection or network release;
    - '24' = Action in contradiction with the current timer state;
    - '25' = Interaction with call control by USIM, temporary problem.
    - '26' = Launch browser generic error code.
  - results '2X' indicate to the UICC that it may be worth re-trying the command at a later opportunity:

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000640

CHANGE REQUEST

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31.111	**CR**	**020**	Current Version:	4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 2000-11-14

Subject: Modification of general result for proactive commands with user confirmation

Work item: USAT

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release	X		Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 00	X

Reason for change: When a proactive command includes a user confirmation, the user is requested to accept or refuse the command, the only result that the ME can provide to the SIM card is “User did not accept call set-up request”. The notion of “call set-up request” for the new command LAUNCH BROWSER / OPEN CHANNEL is no more correct following the bearer used.
There is a need to modify the existing result in order to be more generic. The modification will not lead to a backward compatibility.

Clauses affected: 6.4.13- 6.4.27 – 6.7 - 6.11 – 8.12

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<---------- double-click here for help and instructions on how to create a CR.

6.4.13 SET UP CALL

[…]

- if the user accepts the call, the ME shall then set up a call to the destination address given in the response data, with the relevant capability configuration parameters and called party subaddress (if provided by the UICC);
- if the user does not accept the call, or rejects the call, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept the proactive command~~call set-up request~~). The operation is aborted;
- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with "Proactive UICC session terminated by the user" result value.
- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;
- once a CONNECT message has been received from the network (defined in 3G 24.008), the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE. Operation of the call then proceeds as normal.

If the first call set-up attempt is unsuccessful:

- if the UICC did not request redial then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not redial to set-up the call;
- if the UICC requested redial, then the ME may automatically redial the call (depending on its capability/configuration). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the call set-up has not been successful, and the ME is not going to perform any more redials, or the time elapsed since the first call set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the redial mechanism shall be terminated;
- if the user stops the call set-up attempt or the redial mechanism before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the call set-up details (called party number and associated parameters) sent by the UICC in this command.

[…]

6.4.27 OPEN CHANNEL

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to establish a link.

The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism. The ME shall attempt at least one link establishment set-up.

The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.

If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME informs the UICC of the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;

- if immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept ~~the proactive command call set-up request~~). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the ME is busy on another call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate link establishment is requested, the ME allocates buffers, sets up the link and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand link establishment is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;

- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

- if the user accepts the channel, the ME shall then set up a channel;

- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept the proactive command ~~call set-up request~~). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;

- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;

[…]

6.7 Command results

[…]

Temporary problems are further defined as:

- ME is currently unable to process the command. Specific causes for this are:
  - the screen is busy;
  - ME currently busy on a call;
  - ME currently busy on SEND DTMF operation;
  - ME currently busy on SS transaction;
  - ME currently busy on USSD operation;
  - no service is currently available;
  - access control class barred on serving network;
  - no radio resource currently available;
  - not in speech call;
  - no USIM active.
- if none of these can be made to apply, a "no cause can be given" value can be used;
- network is currently unable to process the command. Specific cause values are the cause values given by the network, as defined in 3G 24.008 [9];
- ~~the user did not accept the call set-up request. This is where the ME alerts the user before setting up a call, and the user either rejected or did not accept the "call";~~
- In some proactive commands the ME is required to solicit and receive approval of the user before executing the proactive command. In the case that the user does not give approval for the execution of the proactive command it is not executed by the ME and the terminal response “user did not accept the proactive command” is returned by the ME to the SIM.
- the user cleared down the call, before the call connected (CONNECT received from network, as defined in 3G 24.008 [9]) or before the network released the call;
- action in contradiction with the current timer state. This is where the UICC requests an action for a timer to be taken by the ME and the state of the timer does not allow that action;
- interaction with call control by UICC, temporary problem. This is sent by the ME to indicate that call control modified the type of request indicated in the proactive command, and that the action requested by call control encounters a temporary problem.

Permanent problems are further defined as:

- command is beyond ME's capabilities. This is sent by the ME when it understands what the UICC is asking it to do, but does not have the capability to do it, e.g. ME which only supports SMS asked to set up a call;

[…]

6.11 Proactive commands versus possible Terminal response

Table 6.1 shows for each proactive command the possible terminal response returned (marked by a "•" character).

Table 6.1: Proactive commands versus possible Terminal response (continued overleaf…)

		PROACTIVE COMMAND																			
	TERMINAL RESPONSE	RE-FRESH '01'	MORE TIME '02'	POLL INTER-VAL '03'	POLL-ING OFF '04'	SETUP EVENT LIST '05'	SET UP CALL '10'	SEND SS '11'	SEND USSD '12'	SEND SMS '13'	SEND DTMF '14'	LAUNCH BROWSER '15'	PLAY TONE '20'	DIS-PLAY TEXT '21'	GET INKEY '22'	GET INPUT '23'	SEL-ECT ITEM '24'	SET UP MENU '25'	PRO-VIDE LOCAL INFO '26'	TIMER MAN-AGE-MENT '27'	SETUP IDLE MODE TEXT '28'
00	Command performed successfully	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
01	Command performed with partial comprehension	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
02	Command performed, with missing information	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
03	REFRESH performed with additional EFs read	•																			
04	Command performed succesfully, but requested icon could not be displayed						•	•	•	•	•		•	•	•	•	•	•			
05	Command performed, but modified by call control by USIM						•	•	•												
06	Command performed successfully, limited service																		•		
07	Command performed with modification																				
08	REFRESH performed but indicated USIM was not active	•																			
10	Proactive UICC session terminated by the user						•				•		•	•	•	•	•				
11	Backward move in the proactive UICC session requested by the user													•	•	•	•				
12	No response from user													•	•	•	•				
13	Help information required by the user														•	•	•				
14	USSD or SS Transaction terminated by user						•	•	•												
20	ME currently unable to process command	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
21	Network currently unable to process command						•	•	•	•		•									
22	User did not accept the proactive command~~call setup request~~						•					•									
23	User cleared down call before connection or network release						•														
24	Action in contradiction with the current timer state																			•	
25	Interaction with call control by USIM, temporary problem						•	•	•												
26	Launch browser generic error											•									
30	Command beyond MEs capabilities	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
31	Command type not understood by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
32	Command data not understood by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
33	Command number not known by ME	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
34	SS Return Error						•	•													
35	SMS RPERROR									•											
36	Error, required values are missing	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
37	USSD return error								•												
38	Multiple Card command error																				
39	Interaction with call/SM control by USIM, permanent problem						•	•	•	•											
3A	Bearer Independent Protocol error																				

Table 6.1: Proactive commands versus possible Terminal response

		PROACTIVE COMMAND														
	TERMINAL RESPONSE	CARD APDU '30'	POWER ON CARD '31'	POWER OFF CARD '32'	GET READ-ER STATUS '33'	RUN AT COMM-AND '34'	LANG NOTIFI CA TION '35'	OPEN CHANN EL '40'	CLOSE CHANN EL '41'	RECEIVE DATA '42'	SEND DATA '43'	GET CHANN EL STATUS '44'				
00	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●				
01	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●				
02	Command performed, with missing information	●	●	●	●	●	●	●	●	●	●	●				
03	REFRESH performed with additional EFs read															
04	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●				
05	Command performed, but modified by call control by USIM															
06	Command performed successfully, limited service															
07	Command performed with modification							●								
08	REFRESH performed but indicated USIM was not active							●								
10	Proactive UICC session terminated by the user							●	●	●	●	●				
11	Backward move in the proactive UICC session requested by the user															
12	No response from user															
13	Help information required by the user															
14	USSD or SS Transaction terminated by user							●	●	●	●	●				
20	ME currently unable to process command	●	●	●	●	●	●	●			●					
21	Network currently unable to process command							●								
22	User did not accept the proactive command~~call setup request~~							●								
23	User cleared down call before connection or network release															
24	Action in contradiction with the current timer state							●								
25	Interaction with call control by USIM, temporary problem							●	●	●	●	●				
26	Launch browser generic error															
30	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●				
31	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●				
32	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●				
33	Command number not known by ME	●	●	●	●	●	●									
34	SS Return Error															
35	SMS RPERROR							●	●	●	●	●				
36	Error, required values are missing	●	●	●	●	●	●									
37	USSD return error															
38	Multiple Card command error	●	●	●	●											
39	Interaction with call/SM control by USIM, permanent problem								●	●	●					
3A	Bearer Independent Protocol error															

8.12 Result

Byte(s)	Description	Length
1	Result tag	1
2 to (Y-1)+2	Length (X)	Y
(Y-1)+3	General result	1
(Y-1)+4 to (Y-1)+X+2	Additional information on result	X-1

- General result:
  - contents: General result specifies the result and indicates appropriate UICC action;
  - coding:
    - '00' = Command performed successfully;
    - '01' = Command performed with partial comprehension;
    - '02' = Command performed, with missing information;
    - '03' = REFRESH performed with additional EFs read;
    - '04' = Command performed successfully, but requested icon could not be displayed;
    - '05' = Command performed, but modified by call control by USIM;
    - '06' = Command performed successfully, limited service;
    - '07' = Command performed with modification;
    - '08' = REFRESH performed but indicated USIM was not active;
    - '10' = Proactive UICC session terminated by the user;
    - '11' = Backward move in the proactive UICC session requested by the user;
    - '12' = No response from user;
    - '13' = Help information required by the user;
    - '14' = USSD or SS transaction terminated by the user.
  - results '0X' and '1X' indicate that the command has been performed:
    - '20' = ME currently unable to process command;
    - '21' = Network currently unable to process command;
    - '22' = User did not accept the proactive command ~~call set-up request;~~
    - '23' = User cleared down call before connection or network release;
    - '24' = Action in contradiction with the current timer state;
    - '25' = Interaction with call control by USIM, temporary problem.
    - '26' = Launch browser generic error code.
  - results '2X' indicate to the UICC that it may be worth re-trying the command at a later opportunity:

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000642

CHANGE REQUEST

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TS 31.111	**CR**	**021**	Current Version:	V3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 2000-11-15

Subject: Clarification of bearer independent related to GPRS

Work item: T.E.I.

Category: *(only one category shall be marked with an X)*

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 4	

Reason for change: The use of the parameters of the bearer independent protocol commands must be clarified.

Clauses affected: 3.2, 6.4.27.1 and 6.4.27.2 (new sections), 6.4.28, 6.4.29, 6.4.30, 6.6.27.1 and 6.6.27.2 (new sections), 6.11, 8.52.1, 8.52.2, 8.54, 8.56, 9.3, Annex I

Other specs affected:

Other 3G core specifications	X	→ List of CRs:	TS 31.111 R4 CR 022
Other GSM core specifications	X	→ List of CRs:	GSM 11.14 R99 CR A189
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

3.2 Abbreviations

For the purpose of the present document, the following abbreviations apply:

[…]

EF	Elementary File
EGPRS	EDGE General Packet Radio Service
ETSI	European Telecommunications Standards Institute
etu	elementary time unit
FDN	Fixed Dialling Number
GGSN	Gateway GPRS Support Node
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
ID	IDentifier
IEC	International Electrotechnical Commission
IMEI	International Mobile Equipment Identity
IMUI	International Mobile User Identity
ISO	International Organization for Standardization
lgth	The (specific) length of a data unit
LND	Last Number Dialled
ME	Mobile Equipment
MMI	Man Machine Interface
NMR	Network Measurement Results (see also 3G 24.008 [9])
NPI	Numbering Plan Identifier
PDN	Packet Data Network
PDP	Packet Data Protocol, e.g., Ip or X25 or PPP
PDU	Protocol Data Unit
RAND	A RANDom challenge issued by the network
R-APDU	Response Application Protocol Data Unit
RFU	Reserved for Future Use

[…]

6.4.27 OPEN CHANNEL

6.4.27.1 OPEN CHANNEL related to CS bearer

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to establish a link.

The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism. The ME shall attempt at least one link establishment set-up.

The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.

If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification). ~~the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;~~

- if immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the ME is busy on another call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate link establishment is requested, the ME allocates buffers, sets up the link and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand link establishment is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;
- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:
  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);
  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.
- if the user accepts the channel, the ME shall then set up a channel;
- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;
- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;
- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;
- if the first link set-up attempt is unsuccessful:
- if the UICC did not request link re-connection then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not retry to set-up the link:
  - if the UICC requested link re-connection, then the ME may automatically retry to set-up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;
  - if the user stops the link set-up attempt or the re-try mechanism before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the UICC in this command.

6.4.27.2 OPEN CHANNEL related to GPRS

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to activate a PDP context~~establish a link~~.

~~The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism.~~ The ME shall attempt at least one PDP context activation. ~~link establishment set-up.~~

~~The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.~~

~~If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.~~

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate PDP context activation ~~link establishment~~ is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters ~~best supported parameters~~ using TERMINAL RESPONSE (Command performed with modification~~Command beyond ME's capabilities~~). ~~The operation is aborted;~~

- if immediate PDP context activation ~~link establishment~~ is requested and the ME is unable to activate the PDP context ~~set up the link~~ with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the class B ME is busy on ~~another~~ call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the class B ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate PDP context activation ~~link establishment~~ is requested, the ME allocates buffers, activates the PDP context ~~sets up the link~~ and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand PDP context activation ~~link establishment~~ is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;

- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

- if the user accepts the channel, the ME shall then set up a channel;

- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;

- optionally, during PDP context activation~~call set up~~, the ME can give some audible or display indication concerning what is happening;

~~- if the first link set-up attempt is unsuccessful:~~

~~- if the UICC did not request link re-connection then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not retry to set-up the link:~~

~~- if the UICC requested link re-connection, then the ME may automatically retry to set-up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;~~

- if the user stops the PDP context activation ~~link set-up~~ attempt ~~or the re-try mechanism~~ before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

~~If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the UICC in this command.~~

6.4.28 CLOSE CHANNEL

This subclause applies only if class "e" is supported.

This command requests the ME to close the channel corresponding to the Channel identifier.

Upon receiving this command, the ME shall decide if it is able to execute the command:

- if the command is rejected because the channel identifier is not valid, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error);

- if the command is rejected because the requested channel is in error, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error).

If the ME is able to process the command:

- the ME shall release the data transfer~~link~~, discard the remaining data and inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE;

- optionally, during CLOSE CHANNEL, the ME can give some audible or display indication concerning what is happening. In this intention, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it to indicate the link closing phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

6.4.29 RECEIVE DATA

This subclause applies only if class "e" is supported.

This command requests the ME to return data from a dedicated Channel identifier according to the number of bytes specified by the UICC.

Upon receiving this command, the ME shall return the data available in the Rx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive.

If the ME is unable to process the command:

- if the command is rejected because the requested channel is already closed the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error);

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE (Proactive UICC session terminated by the user).

If the ME is able to process the command:

- if the requested number of bytes is available in the buffer, the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE and return the requested data and the number of bytes remaining in the channel buffer (or FF if more than the maximum bytes remains);

- if the requested number of bytes is not yet available in the buffer, the ME shall NOT wait for the requested number of bytes to arrive. The ME shall inform the UICC, using TERMINAL RESPONSE (Command performed with missing information) and returns the data currently available in the channel buffer;

- In the case of packet/datagram transmission, the ME shall put in the Rx buffer a complete packet SDU and only one at one time. For example, if UDP datagrams are received by the ME, the latter shall insert only the SDU of each UDP packet received in the Rx buffer. After one SDU has been downloaded by the UICC (using one or several RECEIVE DATA commands), the ME shall insert the next SDU of UDP datagram, and so on.

~~in the case of structured transmission, the structure of the service data unit received by the ME shall be kept intact and shall be fully respected while receiving. The size of service data unit included in the packet PDU is therefore limited to the maximum size of "channel data" in "receive data" response. The ME shall put only one complete service data unit in RX buffer at one time and wait for the RX buffer to be empty before sending the next user data unit. Then the SIM shall receive all "channel data" in one "receive data" command. The SDU is therefore limited to the maximum size of channel data string in terminal response.~~

- if the alpha identifier is provided by the UICC, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.4.30 SEND DATA

This subclause applies only if class "e" is supported.

This command requests the ME to send data through a previously set up data channel corresponding to a dedicated Channel identifier. The UICC informs the ME if the data is:

- to be sent immediately;
- or to be stored in a Tx buffer. Then it is up to the ME to manage the data sending in order to use the bearer in an optimised way. To send the data stored in a Tx buffer, the ME shall be notified by a "send data immediately" and it shall consider the data presently and previously concatenated in its Tx buffer as one SDU, and send it in only one PDU. The Tx buffer shall then be emptied before returning the TERMINAL RESPONSE to the UICC and allowing new UICC sending.

Upon receiving this command, the ME shall either immediatly send data or store provided data into the Tx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive.

If the ME is unable to process the command:

- if the command is rejected because the requested channel is already closed the ME informs the UICC using TERMINAL RESPONSE (Bearer Independent Protocol error);
- if the command is rejected because the channel is temporarily unavailable the ME informs the UICC using TERMINAL RESPONSE (ME currently unable to process command);
- if the requested number of bytes of empty space is not yet available in the buffer the ME informs the UICC using TERMINAL RESPONSE (Bearer Independent Protocol error);
- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE (Proactive UICC session terminated by the user).

If the ME is able to process the command:

- if the requested number of bytes of empty space is available in the buffer the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE and return the number of bytes of empty space available in the Tx buffer (or FF if more then 255 bytes are available);
- in the case of packet/datagram transmission, the structure of the SDU sent by the UICC to the ME shall be fully respected while sending to the ME external interface. The size of the SDU is therefore limited by the size of the packet PDU sent over the ME external interface. In order to send one complete SDU, the USAT application may fill the Tx buffer with several SEND DATA commands, if necessary . Then the ME shall send the complete SDU in one packet PDU.

~~in the case of structured transmission , the structure of the service data unit sent by the application shall be kept intact and shall be fully respected while sending. The size of service data unit in the packet PDU is therefore limited to the size of "channel data" in the send data command. The SIM application shall send user data unit in one send data command. Then the ME shall send "channel data" in one packet PDU. The SDU is therefore limited to the maximum size of channel data string in data send command.~~

- if the alpha identifier is provided by the UICC, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.6.27.1 OPEN CHANNEL related to CS bearer

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J+K+L+M+N+O~~+P+Q~~)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Icon identifier	8.31	O	N	D
Address	8.1	M	Y	E
Subaddress	8.3	O	N	F
Duration 1	8.8	C	N	G
Duration 2	8.8	O	N	H
Bearer description	8.52	M	Y	I
Buffer size	8.55	M	~~N~~Y	J
~~URL (Access Point address)~~	~~8.48~~	~~O~~	~~N~~	~~K~~
Other address (local address)	8.58	O	N	~~L~~K
Text String (User login)	8.15	O	N	~~M~~L
Text String (User password)	8.15	O	N	~~N~~M
SIM/ME interface transport level	8.59	O	N	~~O~~N
~~URL (data destination address)~~	~~8.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	8.58	C	Y	~~Q~~O

~~The address is requested for CS bearer. For other bearers, it shall be ignored. If parameter is not present, the mobile uses the default address mobile configuration if any.~~

The subaddress may be requested ~~for CS bearers only. For other bearers, it shall be ignored~~. If the subaddress is not present, the ME shall not provide a called party subaddress to the network.

Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present or is null, the UICC imposes no restrictions on the ME. Duration 1 shall be present if Duration 2 is present.

Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link. If duration 2 is not present the link is never released automatically by the ME.

~~The Access point address may be requested for GPRS bearer only. For other bearers, it shall be ignored. The Access point address parameter is a URL (see 8.48) which provides information to the ME necessary to identify the entity which provides interworking with an external network. If the parameter is not present, the mobile may use the default access point address mobile configuration or subscription value.~~

The local address parameter (see 8.58) provides information to the ME necessary to identify the local device (i.e. it provides an IP address). If local address length is null, dynamic local address is required. If parameter is not present, the mobile may use the mobile default local address configuration.

The ME may support a remote access login feature (e.g. PPP login). If supported by the ME, the UICC may provide 'User login' and 'User password' parameters which allow the ME to answer an access authentication challenge . If only one parameter is present, it is considered as the User Login and the ME shall use default Password configuration if any. If the parameters are not present, the ME shall use default Login/Password configuration if any. If no authentication challenge is requested, the user login and password parameters shall be ignored.

~~User login parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are

SDUs. When the USAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the USAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the USAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [12]).~~.~~ and the USAT application is in charge of the network and transport layer~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport PDU~~.

The Data destination address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be a URL or~~is a data network address. ~~If a URL and a data network address is present, the URL shall be ignored.~~

6.6.27.2 OPEN CHANNEL related to GPRS

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J~~+K+L+M+N+O+P+Q~~)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Icon identifier	8.31	O	N	D
~~Address~~	~~8.1~~	~~M~~	~~Y~~	~~E~~
~~Subaddress~~	~~8.3~~	~~O~~	~~N~~	~~F~~
~~Duration 1~~	~~8.8~~	~~C~~	~~N~~	~~G~~
~~Duration 2~~	~~8.8~~	~~O~~	~~N~~	~~H~~
Bearer description	8.52	M	Y	~~I~~E
Buffer size	8.55	M	~~N~~Y	~~J~~F
~~URL (~~Access Point Name~~address)~~	8.48	O	N	~~K~~G
Other address (local address)	8.58	O	N	~~L~~H
~~Text String (User login)~~	~~8.15~~	~~O~~	~~N~~	~~M~~
~~Text String (User password)~~	~~8.15~~	~~O~~	~~N~~	~~N~~
SIM/ME interface transport level	8.59	O	N	~~O~~I
~~URL (data destination address)~~	~~8.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	8.58	C	Y	~~Q~~J

~~The address is requested for CS bearer. For other bearers, it shall be ignored. If parameter is not present, the mobile uses the default address mobile configuration if any.~~

~~The subaddress may be requested for CS bearers only. For other bearers, it shall be ignored. If the subaddress is not present, the ME shall not provide a called party subaddress to the network.~~

~~Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present or is null, the UICC imposes no restrictions on the ME. Duration 1 shall be present if Duration 2 is present.~~

~~Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link. If duration 2 is not present the link is never released automatically by the ME.~~

The Access P~~p~~oint ~~address~~ Name may be requested ~~for GPRS bearer only. For other bearers, it shall be ignored~~. The Access P~~p~~oint ~~address~~ Name parameter is an URL (see 8.48) which provides information to the ME necessary to identify the Gateway GSN(GGSN) ~~entity~~ which provides interworking with an external packet data network. If the parameter is not present, the mobile may use the default A~~a~~ccess P~~p~~oint ~~address~~ Name in the mobile configuration or the default subscription value.

The local address parameter (see 8.58) provides information to the ME necessary to identify the local device. If the parameter is present and length is not null, ~~(i.e.~~ it provides an IP address~~)~~ that identifies the USAT application in the address area applicable to the PDN. If local address length is null, dynamic local address allocation is required for the SAT application. If parameter is not present, the mobile may use the mobile default local address configuration.

~~User login parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are SDUs. When the USAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the SAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the USAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [12]), and the USAT application is in charge of the network and transport layer. ~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport-PDU.~~

The Data destination address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be~~is ~~a URL or~~ a data network address (e.g. IP address). ~~If a URL and a data network address is present, the URL shall be ignored.~~

[…]

6.11 Proactive commands versus possible Terminal response

Table 6.1 shows for each proactive command the possible terminal response returned (marked by a "•" character).

Table 6.1: Proactive commands versus possible Terminal response

		PROACTIVE COMMAND													
		CARD APDU	POWER ON CARD	POWER OFF CARD	GET READ-ER STATUS	RUN AT COMM-AND	LANG NOTIFI CA TION	OPEN CHANN EL	CLOSE CHANN EL	RECEIVE DATA	SEND DATA	GET CHANN EL STATUS			
	TERMINAL RESPONSE	'30'	'31'	'32'	'33'	'34'	'35'	'40'	'41'	'42'	'43'	'44'			
00	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●			
01	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●			
02	Command performed, with missing information	●	●	●	●	●	●	●	●	●	●	●			
03	REFRESH performed with additional EFs read														
04	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●			
05	Command performed, but modified by call control by USIM														
06	Command performed successfully, limited service														
07	Command performed with modification							●							
08	REFRESH performed but indicated USIM was not active							●							
10	Proactive UICC session terminated by the user							●	●	●	●	●			
11	Backward move in the proactive UICC session requested by the user														
12	No response from user														
13	Help information required by the user														
14	USSD or SS Transaction terminated by user							●	●	●	●	●			
20	ME currently unable to process command	●	●	●	●	●	●	●	●	●	●	●			
21	Network currently unable to process command							●			●				
22	User did not accept call setup request							●							
23	User cleared down call before connection or network release														
24	Action in contradiction with the current timer state							●							
25	Interaction with call control by USIM, temporary problem							●	●	●	●	●			
26	Launch browser generic error														
30	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●			
31	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
32	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
33	Command number not known by ME	●	●	●	●	●	●	●	●	●	●	●			
34	SS Return Error														
35	SMS RPERROR							●	●	●	●	●			
36	Error, required values are missing	●	●	●	●	●	●	●	●	●	●	●			
37	USSD return error														
38	Multiple Card command error	●	●	●	●										
39	Interaction with call/SM control by USIM, permanent problem								●	●	●				
3A	Bearer Independent Protocol error							●	●	●	●				

8.52.1 Bearer parameters for CSD

Contents: parameters specific to the bearer.

In this case X=3.

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 and values of these subparameters are supported by GSM (refer TS 22.002 [1]).

- Coding : The following values are as defined in the TS 27.007 [12] for the select service bearer type “+CBST” extended command. They are coded in hexadecimal.
- Coding of Byte 4 - Data rate: as the <speed> subparameter defined in [12]

~~'00' = autobauding (automatic selection of the speed; this setting is possible in case of 3.1 kHz modem and non transparent service);~~

~~'01' = 300 bps (V.21);~~

~~'02' = 1200 bps (V.22);~~

~~'03' = 1200/75 bps (V.23);~~

~~'04' = 2400 bps (V.22bis);~~

~~'05' = 2400 bps (V.26ter);~~

~~'06' = 4800 bps (V.32);~~

~~'07' = 9600 bps (V.32);~~

~~'0C' = 9600 bps (V.34);~~

~~'0E' = 14400 bps (V.34);~~

~~'0F' = 19200 bps (V.34);~~

~~'10' = 28800 bps (V.34);~~

~~'22' = 1200 bps (V.120);~~

~~'24' = 2400 bps (V.120);~~

~~'26' = 4800 bps (V.120);~~

~~'27' = 9600 bps (V.120);~~

~~'2B' = 14400 bps (V.120);~~

~~'2F' = 19200 bps (V.120);~~

~~'30' = 28800 bps (V.120);~~

~~'31' = 38400 bps (V.120);~~

~~'32' = 48000 bps (V.120);~~

~~'33' = 56000 bps (V.120);~~

~~'41' = 300 bps (V.110);~~

~~'42' = 1200 bps (V.110);~~

~~'44' = 2400 bps (V.110 or X.31 flag stuffing);~~

~~'46' = 4800 bps (V.110 or X.31 flag stuffing);~~

~~'47' = 9600 bps (V.110 or X.31 flag stuffing);~~

'4B' = 14400 bps (V.110 or X.31 flag stuffing);

'4F' = 19200 bps (V.110 or X.31 flag stuffing);

'50' = 28800 bps (V.110 or X.31 flag stuffing);

'51' = 38400 bps (V.110 or X.31 flag stuffing),

'52' = 48000 bps (V.110 or X.31 flag stuffing);

'53' = 56000 bps (V.110 or X.31 flag stuffing);

'73' = 56000 bps (bit transparent);

'74' = 64000 bps (bit transparent);

also all other values are reserved.

- Coding of byte 5 - bearer service: as the <name> subparameter defined in [12].

'00' = data circuit asynchronous (UDI or 3.1 kHz modem);

'01' = data circuit synchronous (UDI or 3.1 kHz modem);

'02' = PAD Access (asynchronous) (UDI);

'03' = Packet Access (synchronous) (UDI);

'04' = data circuit asynchronous (RDI);

'05' = data circuit synchronous (RDI);

'06' = PAD Access (asynchronous) (RDI);

'07' = Packet Access (synchronous) (RDI);

also all other values are reserved.

- Coding of Byte 6 - connection element: as the <ce> subparameter defined in [12].

'00' = transparent;

'01' = non transparent;

'02' = both, transparent preferred;

'03' = both, non transparent preferred;

also all other values are reserved.

8.52.2 Bearer parameters for GPRS/Packet Service

Contents : parameters describing the Quality of Service (QoS) and the type of PDP. This is an element of the PDP context.

In this case X=8.

Coding : The following values are as defined in the TS 27.007 [12], for the "+CGQREQ" extended command. They are coded in hexadecimal.

- Coding of Byte 4 - Precedence class: as the <precedence> subparameter, defined in [12].

'01' = 1 (High priority);

'02' = 2 (Normal priority);

'03' = 3 (Low priority);

all other values are reserved.

- Coding of Byte 5 - Delay class: as the <delay> subparameter, defined in [12].

'01' = 1;

'02' = 2;

'03' = 3;

'04' = 4;

all other values are reserved.

- Coding of Byte 6 - Reliability class: as the <reliability> subparameter, defined in [12].

'01' = 1;

'02' = 2;

'03' = 3;

'04' = 4;

'05' = 5;

all other values are reserved.

- Coding of Byte 7 - Peak throughput class: as the <peak> subparameter, defined in [12].

'01' = 1 (up to 8 kbit/s);

'02' = 2 (up to 16 kbit/s);

'03' = 3 (up to 32 kbit/s);

'04' = 4 (up to 64 kbit/s);

'05' = 5 (up to 128 kbit/s);

'06' = 6 (up to 256 kbit/s);

'07' = 7 (up to 512 kbit/s);

'08' = 8 (up to 1024 kbit/s);

'09' = 9 (up to 2048 kbit/s);

all other values are reserved.

- Coding of Byte 8 - Mean throughput class: as the <mean> subparameter, defined in [12].

'01' = 1 (~0.22 bit/s);

'02' = 2 (~0.44 bit/s);

'03' = 3 (~1.11 bit/s);

'04' = 4 (~2.2 bit/s);

'05' = 5 (~4.4 bit/s);

'06' = 6 (~11.1 bit/s);

'07' = 7 (~22 bit/s);

~~'08' = 8 (~44 bit/s);~~

~~'09' = 9 (~111 bit/s);~~

~~'0A' = 10 (~0.22 kbit/s);~~

~~'0B' = 11 (~0.44 kbit/s);~~

~~'0C' = 12 (~1.11 kbit/s);~~

~~'0D' = 13 (~2.2 kbit/s);~~

~~'0E' = 14 (~4.4 kbit/s);~~

~~'0F' = 15 (~11.1 kbit/s);~~

~~'10' = 16 (~22 kbit/s);~~

~~'11' = 17 (~44 kbit/s);~~

~~'12' = 18 (~111 kbit/s);~~

~~'13' = 31 (best effort);~~

~~all other values are reserved.~~

- Coding of Byte 9 - Packet data protocol type:

~~'01' = X25 (ITU-T/CCIT X.25 layer 3);~~

- '02' = IP (Internet Protocol, IETF STD 5);

~~'03' = OSPIH (Internet Hosted Octet Stream Protocol);~~

~~'05' = PPP (Point to Point Protocol, IETF STD 51);~~

- all other values are reserved.

~~Coding of Byte 10 - Data compression:~~

~~'00' - off;~~

~~'01' - on;~~

~~all other values are reserved.~~

~~Coding of Byte 11 - TCP/IP header Compression:~~

~~'00' = off;~~

~~'01' = on;~~

~~all other values are reserved.~~

8.54 Channel data length

Byte(s)	Description	Length
1	Channel data length tag	1
2	Length (1)	1
3	Channel data length	1

The Channel data length codes:

- either the number of bytes that are available in a channel buffer (Tx or Rx buffers negotiated during OPEN CHANNEL) using TERMINAL RESPONSE., Since the Tx or Rx buffer size can be larger than 255 bytes, 'FF' means "more than 255 bytes are available".

- or the number of bytes that are requested in a RECEIVE DATA or transmitted in a SEND DATA command.

8.56 Channel status

Byte(s)	Description	Length
1	Data tag	1
2	Length (2)	1
3 to 4	Channel status	2

- Contents:
  - the Channel status is a string of binary coded characters.
- Coding of byte 3:
  - bit 1 to 3: Channel identifier : 1..7;

    Channel identifier 0 means "No channel available".
  - bit 4 to 7: RFU.
  - bit 8: 0 = Link not established or PDP context not activated;

    1 = Link established or PDP context activated.
- Coding of byte 4:
  - '00' = No further info can be given;
  - '01' = Not used~~Rx buffer full~~;
  - '02' = Not used~~Rx buffer empty~~;
  - '03' = Not used~~Tx buffer full~~;
  - '04' = Not used~~Tx buffer empty~~;
  - '05' = Link dropped;
  - all other values are reserved.

9.3 SIMPLE-TLV tags in both directions

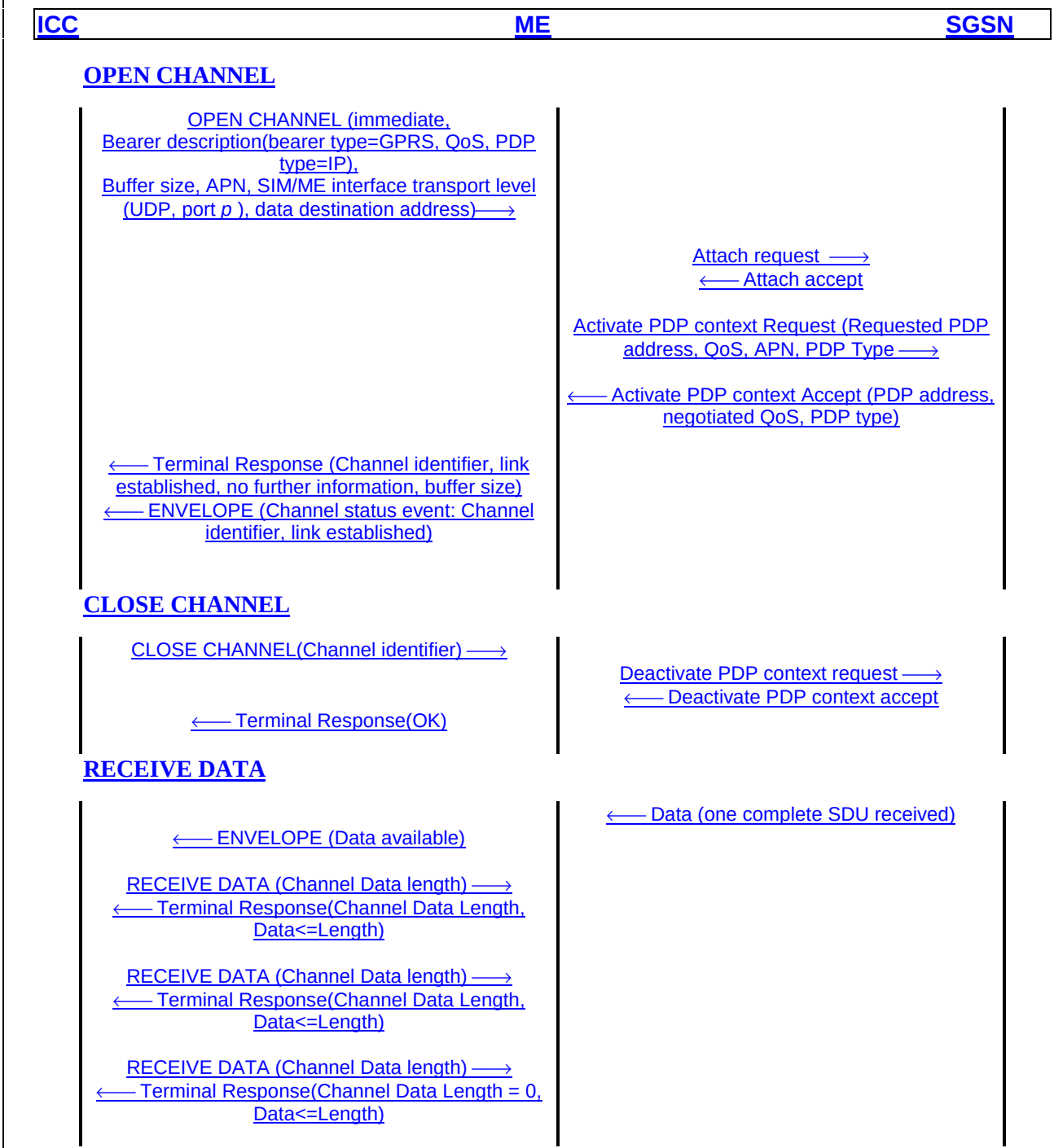
Description	Length of tag	Tag value, bits 1-7 (Range: '01' - '7E')	Tag (CR and Tag value)
[…]	…	…	…
Card reader identifier tag	1	'3A'	'3A' or 'BA'
~~Text String (User password)~~	~~1~~	~~'3B'~~	~~'3B' or 'BB'~~
SIM/ME interface transport level	1	'3C'	'3C' or 'BC'
~~URL (data destination address)~~	~~1~~	~~'3D'~~	~~'3D' or 'BD'~~
Other address (data destination address)	1	'3E'	'3E' or 'BE'

Annex I (informative): Bearer independent protocol proactive command examples

This annex applies only if class "e" is supported.

[…]

Example for GPRS bearer:



SEND DATA 'Stored in Tx Buffer'

SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Immediate, Data) ⟶ ⟵ Terminal Response(Channel Data length = 0)	Data ⟶

GET CHANNEL STATUS

GET CHANNEL STATUS ⟶ ⟵ Terminal Response (Channel status)	1 Channel available

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000643

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

TS 31.111	**CR**	**022**	Current Version:	V4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T #10	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 2000-11-15

Subject: Clarification of bearer independent related to GPRS

Work item: T.E.I.

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release	X		Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 4	X

Reason for change: This is an alignment with the release 99.

Clauses affected: 3.2, 6.4.27.1 and 6.4.27.2 (new sections), 6.4.28, 6.4.29, 6.4.30, 6.6.27.1 and 6.6.27.2 (new sections), 6.11, 8.52.1, 8.52.2, 8.54, 8.56, 9.3, Annex I

Other specs affected:

Other 3G core specifications	X	→ List of CRs:	TS 31.111 R99 CR 021
Other GSM core specifications	X	→ List of CRs:	GSM 11.14 R99 CR A189
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

3.2 Abbreviations

For the purpose of the present document, the following abbreviations apply:

[…]

EF	Elementary File
EGPRS	EDGE General Packet Radio Service
ETSI	European Telecommunications Standards Institute
etu	elementary time unit
FDN	Fixed Dialling Number
GGSN	Gateway GPRS Support Node
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
ID	IDentifier
IEC	International Electrotechnical Commission
IMEI	International Mobile Equipment Identity
IMUI	International Mobile User Identity
ISO	International Organization for Standardization
lgth	The (specific) length of a data unit
LND	Last Number Dialled
ME	Mobile Equipment
MMI	Man Machine Interface
NMR	Network Measurement Results (see also 3G 24.008 [9])
NPI	Numbering Plan Identifier
PDN	Packet Data Network
PDP	Packet Data Protocol, e.g., Ip or X25 or PPP
PDU	Protocol Data Unit
RAND	A RANDom challenge issued by the network
R-APDU	Response Application Protocol Data Unit
RFU	Reserved for Future Use

[…]

6.4.27 OPEN CHANNEL

6.4.27.1 OPEN CHANNEL related to CS bearer

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to establish a link.

The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism. The ME shall attempt at least one link establishment set-up.

The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.

If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification). ~~the best supported parameters using TERMINAL RESPONSE (Command beyond ME's capabilities). The operation is aborted;~~

- if immediate link establishment is requested and the ME is unable to set-up the link with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the ME is busy on another call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate link establishment is requested, the ME allocates buffers, sets up the link and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand link establishment is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;
- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:
  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);
  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.
- if the user accepts the channel, the ME shall then set up a channel;
- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;
- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;
- optionally, during call set-up, the ME can give some audible or display indication concerning what is happening;
- if the first link set-up attempt is unsuccessful:
- if the UICC did not request link re-connection then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not retry to set-up the link:
  - if the UICC requested link re-connection, then the ME may automatically retry to set-up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;
  - if the user stops the link set-up attempt or the re-try mechanism before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the UICC in this command.

6.4.27.2 OPEN CHANNEL related to GPRS

This subclause applies only if class "e" is supported.

Upon receiving this command, the ME shall decide if it is able to execute the command. The UICC shall indicate whether the ME should establish the link immediately or upon receiving the first transmitted data (on demand).

The UICC provides to the ME a list of parameters necessary to activate a PDP context~~establish a link~~.

~~The UICC may request the use of an automatic reconnection mechanism according to GSM 02.07 [20]. The UICC may also request an optional maximum duration for the reconnection mechanism.~~ The ME shall attempt at least one PDP context activation. ~~link establishment set-up.~~

~~The UICC may also request an optional maximum duration for the ME to automatically release the link if no data is exchanged.~~

~~If the Fixed Dialling Number service is enabled, the address included in the OPEN CHANNEL proactive command shall not be checked against those of the FDN list.~~

Upon receiving this command, the ME shall decide if it is able to execute the command. Examples are given below, but the list is not exhaustive:

- if immediate PDP context activation ~~link establishment~~ is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters ~~best supported parameters~~ using TERMINAL RESPONSE (Command performed with modification~~Command beyond ME's capabilities~~). ~~The operation is aborted;~~

- if immediate PDP context activation ~~link establishment~~ is requested and the ME is unable to activate the PDP context ~~set up the link~~ with the network using the exact parameters provided by the UICC, the ME informs the UICC using TERMINAL RESPONSE (Network currently unable to process command). The operation is aborted;

- if on demand link establishment is requested and the ME is unable to set-up a channel using the exact parameters provided by the UICC, the ME sets up the channel using the best parameters it can support and informs the UICC of the channel identifier and the modified parameters using TERMINAL RESPONSE (Command performed with modification);

- if the command is rejected because the ME has no channel left with the requested bearer capabilities, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error). The operation is aborted;

- if the user does not accept the channel set-up, the ME informs the UICC using TERMINAL RESPONSE (User did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE(Proactive UICC session terminated by the user). The operation is aborted;

- if the command is rejected because the class B ME is busy on ~~another~~ call, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on call). The operation is aborted;

- if the command is rejected because the class B ME is busy on a SS transaction, the ME informs the UICC using TERMINAL RESPONSE (ME unable to process command - currently busy on SS transaction). The operation is aborted.

The ME shall inform the UICC that the command has been successfully executed using TERMINAL RESPONSE:

- if immediate PDP context activation ~~link establishment~~ is requested, the ME allocates buffers, activates the PDP context ~~sets up the link~~ and informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully);

- if on demand PDP context activation ~~link establishment~~ is requested, the ME allocates buffers, informs the UICC and reports the channel identifier using TERMINAL RESPONSE (Command performed successfully).

If the ME is able to set up the channel on the serving network, the ME shall:

- alert the user (as for an incoming call). This is the confirmation phase;

- optionally, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it during the user confirmation phase. This is also an indication that the ME should not give any other information to the user during the user confirmation phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

- if the user accepts the channel, the ME shall then set up a channel;

- if the user does not accept the channel or rejects the channel, then the ME informs the UICC using TERMINAL RESPONSE (user did not accept call set-up request). The operation is aborted;

- if the user has indicated the need to end the proactive UICC session, the ME shall send a TERMINAL RESPONSE with (Proactive UICC session terminated by the user) result value;

- optionally, during PDP context activation~~call set-up~~, the ME can give some audible or display indication concerning what is happening;

~~- if the first link set-up attempt is unsuccessful:~~

~~- if the UICC did not request link re-connection then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and not retry to set-up the link:~~

~~- if the UICC requested link re-connection, then the ME may automatically retry to set-up the link (depending on its configuration capabilities). In this case, the ME shall not send a command result to the UICC concerning the first or any subsequent failed set-up attempts. If the link set-up has not been successful, and the ME is not going to perform any more re-tries, or the time elapsed since the first link set-up attempt has exceeded the duration requested by the UICC, then the ME shall inform the UICC using TERMINAL RESPONSE (network currently unable to process command), and the re-try mechanism shall be terminated;~~

- if the user stops the PDP context activation ~~link set-up~~ attempt ~~or the re-try mechanism~~ before a result is received from the network, the ME informs the UICC using TERMINAL RESPONSE (user cleared down call before connection or network release).

~~If the ME supports the Last Number Dialled service, the ME shall not store in EF_{LND} the channel set-up details (called party number and associated parameters) sent by the UICC in this command.~~

6.4.28 CLOSE CHANNEL

This subclause applies only if class "e" is supported.

This command requests the ME to close the channel corresponding to the Channel identifier.

Upon receiving this command, the ME shall decide if it is able to execute the command:

- if the command is rejected because the channel identifier is not valid, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error);

- if the command is rejected because the requested channel is in error, the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error).

If the ME is able to process the command:

- the ME shall release the data transfer~~link~~, discard the remaining data and inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE;

- optionally, during CLOSE CHANNEL, the ME can give some audible or display indication concerning what is happening. In this intention, the UICC may include in this command an alpha-identifier. The use of this alpha-identifier by the ME is described below:

  - if the alpha identifier is provided by the UICC and is not a null data object, the ME shall use it to indicate the link closing phase. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4);

  - if the alpha identifier is not provided by the UICC or is a null data object (i.e. length = '00' and no value part), the ME may give information to the user.

6.4.29 RECEIVE DATA

This subclause applies only if class "e" is supported.

This command requests the ME to return data from a dedicated Channel identifier according to the number of bytes specified by the UICC.

Upon receiving this command, the ME shall return the data available in the Rx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive.

If the ME is unable to process the command:

- if the command is rejected because the requested channel is already closed the ME informs the UICC using TERMINAL RESPONSE (Bearer independent protocol error);

- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE (Proactive UICC session terminated by the user).

If the ME is able to process the command:

- if the requested number of bytes is available in the buffer, the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE and return the requested data and the number of bytes remaining in the channel buffer (or FF if more than the maximum bytes remains);

- if the requested number of bytes is not yet available in the buffer, the ME shall NOT wait for the requested number of bytes to arrive. The ME shall inform the UICC, using TERMINAL RESPONSE (Command performed with missing information) and returns the data currently available in the channel buffer;

- In the case of packet/datagram transmission, the ME shall put in the Rx buffer a complete packet SDU and only one at one time. For example, if UDP datagrams are received by the ME, the latter shall insert only the SDU of each UDP packet received in the Rx buffer. After one SDU has been downloaded by the UICC (using one or several RECEIVE DATA commands), the ME shall insert the next SDU of UDP datagram, and so on.

~~in the case of structured transmission, the structure of the service data unit received by the ME shall be kept intact and shall be fully respected while receiving. The size of service data unit included in the packet PDU is therefore limited to the maximum size of "channel data" in "receive data" response. The ME shall put only one complete service data unit in RX buffer at one time and wait for the RX buffer to be empty before sending the next user data unit. Then the SIM shall receive all "channel data" in one "receive data" command. The SDU is therefore limited to the maximum size of channel data string in terminal response.~~

- if the alpha identifier is provided by the UICC, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.4.30 SEND DATA

This subclause applies only if class "e" is supported.

This command requests the ME to send data through a previously set up data channel corresponding to a dedicated Channel identifier. The UICC informs the ME if the data is:

- to be sent immediately;
- or to be stored in a Tx buffer. Then it is up to the ME to manage the data sending in order to use the bearer in an optimised way. To send the data stored in a Tx buffer, the ME shall be notified by a "send data immediately" and it shall consider the data presently and previously concatenated in its Tx buffer as one SDU, and send it in only one PDU. The Tx buffer shall then be emptied before returning the TERMINAL RESPONSE to the UICC and allowing new UICC sending.

Upon receiving this command, the ME shall either immediatly send data or store provided data into the Tx buffer corresponding to the Channel identifier. Examples are given below, but the list is not exhaustive.

If the ME is unable to process the command:

- if the command is rejected because the requested channel is already closed the ME informs the UICC using TERMINAL RESPONSE (Bearer Independent Protocol error);
- if the command is rejected because the channel is temporarily unavailable the ME informs the UICC using TERMINAL RESPONSE (ME currently unable to process command);
- if the requested number of bytes of empty space is not yet available in the buffer the ME informs the UICC using TERMINAL RESPONSE (Bearer Independent Protocol error);
- if the user has indicated the need to end the proactive UICC session, the ME informs the UICC using TERMINAL RESPONSE (Proactive UICC session terminated by the user).

If the ME is able to process the command:

- if the requested number of bytes of empty space is available in the buffer the ME shall inform the UICC that the command has been successfully executed, using TERMINAL RESPONSE and return the number of bytes of empty space available in the Tx buffer (or FF if more then 255 bytes are available);
- in the case of packet/datagram transmission, the structure of the SDU sent by the UICC to the ME shall be fully respected while sending to the ME external interface. The size of the SDU is therefore limited by the size of the packet PDU sent over the ME external interface. In order to send one complete SDU, the USAT application may fill the Tx buffer with several SEND DATA commands, if necessary . Then the ME shall send the complete SDU in one packet PDU.

~~in the case of structured transmission , the structure of the service data unit sent by the application shall be kept intact and shall be fully respected while sending. The size of service data unit in the packet PDU is therefore limited to the size of "channel data" in the send data command. The SIM application shall send user data unit in one send data command. Then the ME shall send "channel data" in one packet PDU. The SDU is therefore limited to the maximum size of channel data string in data send command.~~

- if the alpha identifier is provided by the UICC, the ME shall use it to inform the user. The ME may also use it to inform the user during data transfer. If an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier (see subclause 6.5.4).

6.6.27.1 OPEN CHANNEL related to CS bearer

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J+K+L+M+N+O~~+P+Q~~)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Icon identifier	8.31	O	N	D
Address	8.1	M	Y	E
Subaddress	8.3	O	N	F
Duration 1	8.8	C	N	G
Duration 2	8.8	O	N	H
Bearer description	8.52	M	Y	I
Buffer size	8.55	M	~~N~~Y	J
~~URL (Access Point address)~~	~~8.48~~	~~O~~	~~N~~	~~K~~
Other address (local address)	8.58	O	N	~~L~~K
Text String (User login)	8.15	O	N	~~M~~L
Text String (User password)	8.15	O	N	~~N~~M
SIM/ME interface transport level	8.59	O	N	~~O~~N
~~URL (data destination address)~~	~~8.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	8.58	C	Y	~~Q~~O

~~The address is requested for CS bearer. For other bearers, it shall be ignored. If parameter is not present, the mobile uses the default address mobile configuration if any.~~

The subaddress may be requested ~~for CS bearers only. For other bearers, it shall be ignored~~. If the subaddress is not present, the ME shall not provide a called party subaddress to the network.

Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present or is null, the UICC imposes no restrictions on the ME. Duration 1 shall be present if Duration 2 is present.

Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link. If duration 2 is not present the link is never released automatically by the ME.

~~The Access point address may be requested for GPRS bearer only. For other bearers, it shall be ignored. The Access point address parameter is a URL (see 8.48) which provides information to the ME necessary to identify the entity which provides interworking with an external network. If the parameter is not present, the mobile may use the default access point address mobile configuration or subscription value.~~

The local address parameter (see 8.58) provides information to the ME necessary to identify the local device (i.e. it provides an IP address). If local address length is null, dynamic local address is required. If parameter is not present, the mobile may use the mobile default local address configuration.

The ME may support a remote access login feature (e.g. PPP login). If supported by the ME, the UICC may provide 'User login' and 'User password' parameters which allow the ME to answer an access authentication challenge . If only one parameter is present, it is considered as the User Login and the ME shall use default Password configuration if any. If the parameters are not present, the ME shall use default Login/Password configuration if any. If no authentication challenge is requested, the user login and password parameters shall be ignored.

~~User login parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are

SDUs. When the USAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the USAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the USAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [12]).~~.~~ and the USAT application is in charge of the network and transport layer~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport PDU~~.

The Data destination address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be a URL or~~is a data network address. ~~If a URL and a data network address is present, the URL shall be ignored.~~

6.6.27.2 OPEN CHANNEL related to GPRS

Description	Subclause	M/O/C	Min	Length
Proactive UICC command Tag	9.2	M	Y	1
Length (A+B+C+D+E+F+G+H+I+J~~+K+L+M+N+O+P+Q~~)	-	M	Y	1 or 2
Command details	8.6	M	Y	A
Device identities	8.7	M	Y	B
Alpha identifier	8.2	O	N	C
Icon identifier	8.31	O	N	D
~~Address~~	~~8.1~~	~~M~~	~~Y~~	~~E~~
~~Subaddress~~	~~8.3~~	~~O~~	~~N~~	~~F~~
~~Duration 1~~	~~8.8~~	~~C~~	~~N~~	~~G~~
~~Duration 2~~	~~8.8~~	~~O~~	~~N~~	~~H~~
Bearer description	8.52	M	Y	~~I~~E
Buffer size	8.55	M	~~N~~Y	~~J~~F
~~URL (~~Access Point Name~~address)~~	8.48	O	N	~~K~~G
Other address (local address)	8.58	O	N	~~L~~H
~~Text String (User login)~~	~~8.15~~	~~O~~	~~N~~	~~M~~
~~Text String (User password)~~	~~8.15~~	~~O~~	~~N~~	~~N~~
SIM/ME interface transport level	8.59	O	N	~~O~~I
~~URL (data destination address)~~	~~8.48~~	~~C~~	~~Y~~	~~P~~
~~Other address (~~data destination address~~)~~	8.58	C	Y	~~Q~~J

~~The address is requested for CS bearer. For other bearers, it shall be ignored. If parameter is not present, the mobile uses the default address mobile configuration if any.~~

~~The subaddress may be requested for CS bearers only. For other bearers, it shall be ignored. If the subaddress is not present, the ME shall not provide a called party subaddress to the network.~~

~~Duration 1 indicates the duration of reconnection tries. If Duration 1 is not present or is null, the UICC imposes no restrictions on the ME. Duration 1 shall be present if Duration 2 is present.~~

~~Duration 2 indicates the timeout value before the ME releases the link if there is no data exchanged on the link. If duration 2 is not present the link is never released automatically by the ME.~~

The Access P~~p~~oint ~~address~~ Name may be requested~~ for GPRS bearer only. For other bearers, it shall be ignored~~. The Access P~~p~~oint ~~address~~ Name parameter is an URL (see 8.48) which provides information to the ME necessary to identify the Gateway GSN(GGSN) ~~entity~~ which provides interworking with an external packet data network. If the parameter is not present, the mobile may use the default A~~a~~ccess P~~p~~oint ~~address~~ Name in the mobile configuration or the default subscription value.

The local address parameter (see 8.58) provides information to the ME necessary to identify the local device. If the parameter is present and length is not null, ~~(i.e.~~ it provides an IP address~~)~~ that identifies the USAT application in the address area applicable to the PDN. If local address length is null, dynamic local address allocation is required for the SAT application. If parameter is not present, the mobile may use the mobile default local address configuration.

~~User login parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access login (e.g. it may provide PPP login). If parameter is not present, the mobile uses default login configuration if any. If no authentication challenge is requested, the user login parameter shall be ignored.~~

~~User password parameter is a text string (see 8.15) which provides information to the ME necessary to answer authentication challenge by supplying access password (e.g. it may provide PPP password). If the parameter is not present, the mobile may use the default password configuration if any. If no authentication challenge is requested, the user password paremeter shall be ignored.~~

If the SIM/ME interface transport level is present in the command, then the ME shall provide the requested transport layer protocols under the channel and shall use this object containing a set of parameters required to make the transport connection. The data that is exchanged at the SIM/ME interface in the RECEIVE DATA/SEND DATA commands are SDUs. When the USAT application sends an SDU, the transport layer within the ME is in charge to add the transport header to the SDU in order to build the Transport-PDU. When the SAT application requests to receive an SDU, the transport layer within the ME is in charge to remove the transport header of the Transport-PDU, and to forward the SDU to the USAT. If the parameter is not present, the SIM/ME interface is the bearer level (serial link or packet link as ~~AT command~~ defined in TS 27.007 [12]), and the USAT application is in charge of the network and transport layer. ~~The data that will be received/sent from the SAT to the transport layer is a SDU that will be received/transmitted in the Transport-PDU.~~

The Data destination address is the end point destination address of sent data. This data destination address is requested when a SIM/ME interface transport is present, otherwise it is ignored. The data destination address ~~may be~~is ~~a URL or~~ a data network address (e.g. IP address). ~~If a URL and a data network address is present, the URL shall be ignored.~~

[…]

6.11 Proactive commands versus possible Terminal response

Table 6.1 shows for each proactive command the possible terminal response returned (marked by a "•" character).

Table 6.1: Proactive commands versus possible Terminal response

		PROACTIVE COMMAND													
		CARD APDU	POWER ON CARD	POWER OFF CARD	GET READ-ER STATUS	RUN AT COMM-AND	LANG NOTIFI CA TION	OPEN CHANN EL	CLOSE CHANN EL	RECEIVE DATA	SEND DATA	GET CHANN EL STATUS			
	TERMINAL RESPONSE	'30'	'31'	'32'	'33'	'34'	'35'	'40'	'41'	'42'	'43'	'44'			
00	Command performed successfully	●	●	●	●	●	●	●	●	●	●	●			
01	Command performed with partial comprehension	●	●	●	●	●	●	●	●	●	●	●			
02	Command performed, with missing information	●	●	●	●	●	●	●	●	●	●	●			
03	REFRESH performed with additional EFs read														
04	Command performed succesfully, but requested icon could not be displayed							●	●	●	●	●			
05	Command performed, but modified by call control by USIM														
06	Command performed successfully, limited service														
07	Command performed with modification							●							
08	REFRESH performed but indicated USIM was not active							●							
10	Proactive UICC session terminated by the user							●	●	●	●	●			
11	Backward move in the proactive UICC session requested by the user														
12	No response from user														
13	Help information required by the user														
14	USSD or SS Transaction terminated by user							●	●	●	●	●			
20	ME currently unable to process command	●	●	●	●	●	●	●	●	●	●	●			
21	Network currently unable to process command							●			●				
22	User did not accept call setup request							●							
23	User cleared down call before connection or network release														
24	Action in contradiction with the current timer state							●							
25	Interaction with call control by USIM, temporary problem							●	●	●	●	●			
26	Launch browser generic error														
30	Command beyond MEs capabilities	●	●	●	●	●	●	●	●	●	●	●			
31	Command type not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
32	Command data not understood by ME	●	●	●	●	●	●	●	●	●	●	●			
33	Command number not known by ME	●	●	●	●	●	●	●	●	●	●	●			
34	SS Return Error														
35	SMS RPERROR							●	●	●	●	●			
36	Error, required values are missing	●	●	●	●	●	●	●	●	●	●	●			
37	USSD return error														
38	Multiple Card command error	●	●	●	●										
39	Interaction with call/SM control by USIM, permanent problem								●	●	●				
3A	Bearer Independent Protocol error							●	●	●	●				

8.52.1 Bearer parameters for CSD

Contents: parameters specific to the bearer.

In this case X=3.

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 and values of these subparameters are supported by GSM (refer TS 22.002 [1]).

- Coding : The following values are as defined in the TS 27.007 [12] for the select service bearer type “+CBST” extended command. They are coded in hexadecimal.

- Coding of Byte 4 - Data rate: as the <speed> subparameter defined in [12]

  ~~'00' = autobauding (automatic selection of the speed; this setting is possible in case of 3.1 kHz modem and non transparent service);~~

  ~~'01' = 300 bps (V.21);~~

  ~~'02' = 1200 bps (V.22);~~

  ~~'03' = 1200/75 bps (V.23);~~

  ~~'04' = 2400 bps (V.22bis);~~

  ~~'05' = 2400 bps (V.26ter);~~

  ~~'06' = 4800 bps (V.32);~~

  ~~'07' = 9600 bps (V.32);~~

  ~~'0C' = 9600 bps (V.34);~~

  ~~'0E' = 14400 bps (V.34);~~

  ~~'0F' = 19200 bps (V.34);~~

  ~~'10' = 28800 bps (V.34);~~

  ~~'22' = 1200 bps (V.120);~~

  ~~'24' = 2400 bps (V.120);~~

  ~~'26' = 4800 bps (V.120);~~

  ~~'27' = 9600 bps (V.120);~~

  ~~'2B' = 14400 bps (V.120);~~

  ~~'2F' = 19200 bps (V.120);~~

  ~~'30' = 28800 bps (V.120);~~

  ~~'31' = 38400 bps (V.120);~~

  ~~'32' = 48000 bps (V.120);~~

  ~~'33' = 56000 bps (V.120);~~

  ~~'41' = 300 bps (V.110);~~

  ~~'42' = 1200 bps (V.110);~~

  ~~'44' = 2400 bps (V.110 or X.31 flag stuffing);~~

  ~~'46' = 4800 bps (V.110 or X.31 flag stuffing);~~

  ~~'47' = 9600 bps (V.110 or X.31 flag stuffing);~~

'4B' = 14400 bps (V.110 or X.31 flag stuffing);

'4F' = 19200 bps (V.110 or X.31 flag stuffing);

'50' = 28800 bps (V.110 or X.31 flag stuffing);

'51' = 38400 bps (V.110 or X.31 flag stuffing),

'52' = 48000 bps (V.110 or X.31 flag stuffing);

'53' = 56000 bps (V.110 or X.31 flag stuffing);

'73' = 56000 bps (bit transparent);

'74' = 64000 bps (bit transparent);

also all other values are reserved.

- Coding of byte 5 - bearer service: as the <name> subparameter defined in [12].

'00' = data circuit asynchronous (UDI or 3.1 kHz modem);

'01' = data circuit synchronous (UDI or 3.1 kHz modem);

'02' = PAD Access (asynchronous) (UDI);

'03' = Packet Access (synchronous) (UDI);

'04' = data circuit asynchronous (RDI);

'05' = data circuit synchronous (RDI);

'06' = PAD Access (asynchronous) (RDI);

'07' = Packet Access (synchronous) (RDI);

also all other values are reserved.

- Coding of Byte 6 - connection element: as the <ce> subparameter defined in [12].

'00' = transparent;

'01' = non transparent;

'02' = both, transparent preferred;

'03' = both, non transparent preferred;

also all other values are reserved.

8.52.2 Bearer parameters for GPRS/Packet Service

Contents : parameters describing the Quality of Service (QoS) and the type of PDP. This is an element of the PDP context.

In this case X=8.

Coding : The following values are as defined in the TS 27.007 [12], for the "+CGQREQ" extended command. They are coded in hexadecimal.

- Coding of Byte 4 - Precedence class: as the <precedence> subparameter, defined in [12].

'01' = 1 (High priority);

'02' = 2 (Normal priority);

'03' = 3 (Low priority);

all other values are reserved.

- Coding of Byte 5 - Delay class: as the <delay> subparameter, defined in [12].

'01' = 1;

'02' = 2;

'03' = 3;

'04' = 4;

all other values are reserved.

- Coding of Byte 6 - Reliability class: as the <reliability> subparameter, defined in [12].

'01' = 1;

'02' = 2;

'03' = 3;

'04' = 4;

'05' = 5;

all other values are reserved.

- Coding of Byte 7 - Peak throughput class: as the <peak> subparameter, defined in [12].

'01' = 1 (up to 8 kbit/s);

'02' = 2 (up to 16 kbit/s);

'03' = 3 (up to 32 kbit/s);

'04' = 4 (up to 64 kbit/s);

'05' = 5 (up to 128 kbit/s);

'06' = 6 (up to 256 kbit/s);

'07' = 7 (up to 512 kbit/s);

'08' = 8 (up to 1024 kbit/s);

'09' = 9 (up to 2048 kbit/s);

all other values are reserved.

- Coding of Byte 8 - Mean throughput class: as the <mean> subparameter, defined in [12].

'01' = 1 (~0.22 bit/s);

'02' = 2 (~0.44 bit/s);

'03' = 3 (~1.11 bit/s);

'04' = 4 (~2.2 bit/s);

'05' = 5 (~4.4 bit/s);

'06' = 6 (~11.1 bit/s);

'07' = 7 (~22 bit/s);

~~'08' = 8 (~44 bit/s);~~

~~'09' = 9 (~111 bit/s);~~

~~'0A' = 10 (~0.22 kbit/s);~~

~~'0B' = 11 (~0.44 kbit/s);~~

~~'0C' = 12 (~1.11 kbit/s);~~

~~'0D' = 13 (~2.2 kbit/s);~~

~~'0E' = 14 (~4.4 kbit/s);~~

~~'0F' = 15 (~11.1 kbit/s);~~

~~'10' = 16 (~22 kbit/s);~~

~~'11' = 17 (~44 kbit/s);~~

~~'12' = 18 (~111 kbit/s);~~

~~'13' = 31 (best effort);~~

~~all other values are reserved.~~

- Coding of Byte 9 - Packet data protocol type:

~~'01' = X25 (ITU-T/CCIT X.25 layer 3);~~

- '02' = IP (Internet Protocol, IETF STD 5);

~~'03' = OSPIH (Internet Hosted Octet Stream Protocol);~~

~~'05' = PPP (Point to Point Protocol, IETF STD 51);~~

- all other values are reserved.

~~Coding of Byte 10 - Data compression:~~

~~'00' - off;~~

~~'01' - on;~~

~~all other values are reserved.~~

~~Coding of Byte 11 - TCP/IP header Compression:~~

~~'00' = off;~~

~~'01' = on;~~

~~all other values are reserved.~~

8.54 Channel data length

Byte(s)	Description	Length
1	Channel data length tag	1
2	Length (1)	1
3	Channel data length	1

The Channel data length codes:

- either the number of bytes that are available in a channel buffer (Tx or Rx buffers negotiated during OPEN CHANNEL) using TERMINAL RESPONSE., Since the Tx or Rx buffer size can be larger than 255 bytes, 'FF' means "more than 255 bytes are available".

- or the number of bytes that are requested in a RECEIVE DATA or transmitted in a SEND DATA command.

8.56 Channel status

Byte(s)	Description	Length
1	Data tag	1
2	Length (2)	1
3 to 4	Channel status	2

- Contents:
  - the Channel status is a string of binary coded characters.
- Coding of byte 3:
  - bit 1 to 3: Channel identifier : 1..7;

    Channel identifier 0 means "No channel available".
  - bit 4 to 7: RFU.
  - bit 8: 0 = Link not established or PDP context not activated;

    1 = Link established or PDP context activated.
- Coding of byte 4:
  - '00' = No further info can be given;
  - '01' = Not used~~Rx buffer full~~;
  - '02' = Not used~~Rx buffer empty~~;
  - '03' = Not used~~Tx buffer full~~;
  - '04' = Not used~~Tx buffer empty~~;
  - '05' = Link dropped;
  - all other values are reserved.

9.3 SIMPLE-TLV tags in both directions

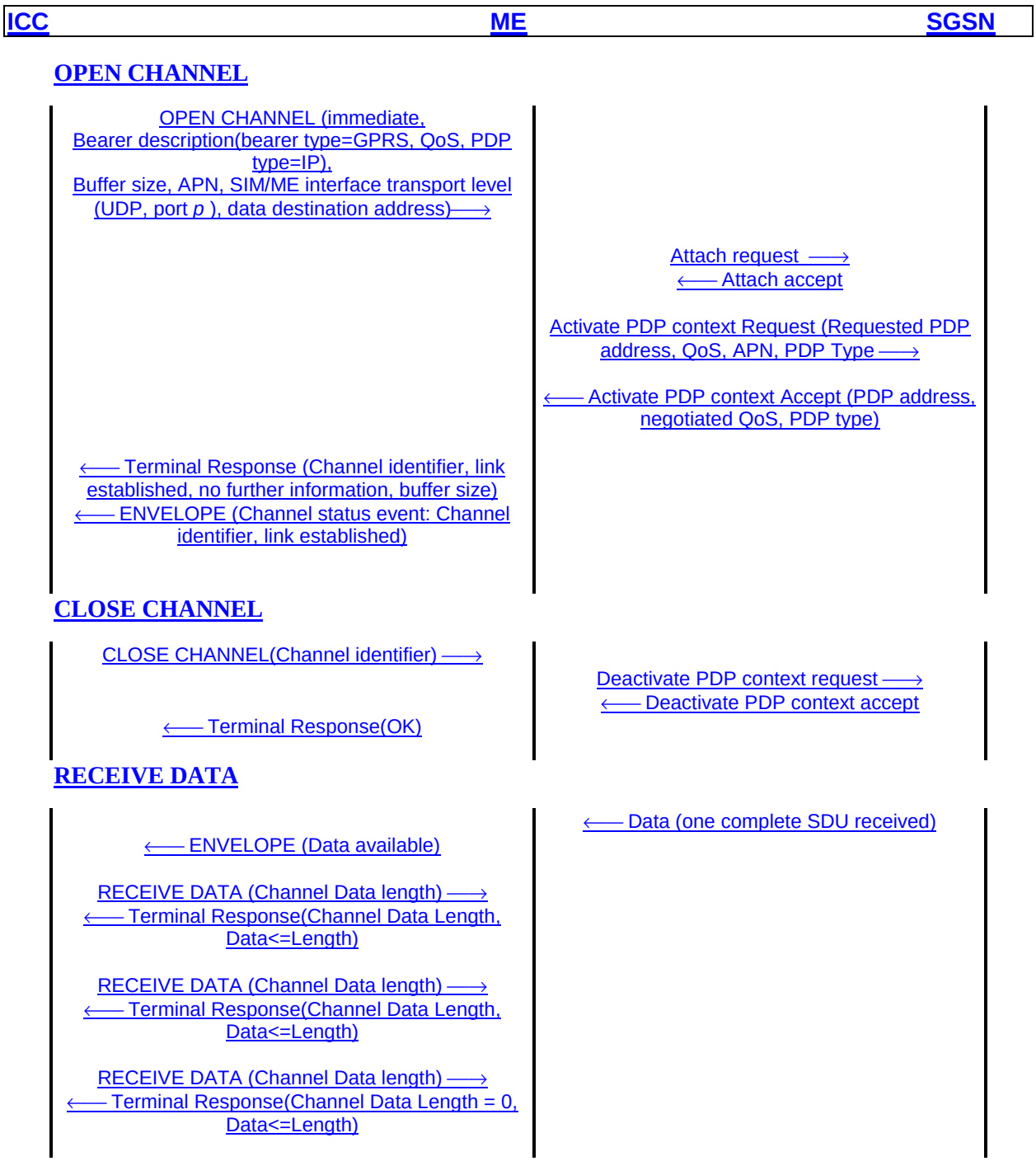
Description	Length of tag	Tag value, bits 1-7 (Range: '01' - '7E')	Tag (CR and Tag value)
[…]	…	…	…
Card reader identifier tag	1	'3A'	'3A' or 'BA'
~~Text String (User password)~~	~~1~~	~~'3B'~~	~~'3B' or 'BB'~~
SIM/ME interface transport level	1	'3C'	'3C' or 'BC'
~~URL (data destination address)~~	~~1~~	~~'3D'~~	~~'3D' or 'BD'~~
Other address (data destination address)	1	'3E'	'3E' or 'BE'

Annex I (informative): Bearer independent protocol proactive command examples

This annex applies only if class "e" is supported.

[…]

Example for GPRS bearer:



SEND DATA 'Stored in Tx Buffer'

SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Store, Data) ⟶ ⟵ Terminal Response(Channel Data length)	
SEND DATA (Immediate, Data) ⟶ ⟵ Terminal Response(Channel Data length = 0)	Data ⟶

GET CHANNEL STATUS

GET CHANNEL STATUS ⟶ ⟵ Terminal Response (Channel status)	1 Channel available

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000645

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

31.111	**CR**	**023**	Current Version:	3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG-T #10 *list expected approval meeting # here ↑*

for approval [X] for information [ ]

strategic [ ] non-strategic [ ] *(for SMG use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 15/11/2000

Subject: Correction to device identity coding

Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	[X]
A	Corresponds to a correction in an earlier release	[ ]
B	Addition of feature	[ ]
C	Functional modification of feature	[ ]
D	Editorial modification	[ ]

Release:

Phase 2	[ ]
Release 96	[ ]
Release 97	[ ]
Release 98	[ ]
Release 99	[X]
Release 00	[ ]

Reason for change: Inconsistency resolution between clauses 8.7 and 8.56.
In clause 8.56 it is mentioned that Channel 0 means no channel available. In Terminal Profile, only 7 channels can be defined (see clause 5.2)

Clauses affected: 8.7

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:


help.doc

<--------- double-click here for help and instructions on how to create a CR.

8.7 Device identities

Byte(s)	Description	Length
1	Device identities tag	1
2	Length = '02'	1
3	Source device identity	1
4	Destination device identity	1

- Source device identity:
  - contents: the source device for information held in the data objects which follow.
- Destination device identity:
  - contents: the destination device for information held in the data objects which follow;

NOTE: Only some combinations of Type of Command, Data Download type and Device identities are allowed. These are defined in clause 10.

  - coding: both Source and Destination device identities are coded as follows:
    - '01' = Keypad;
    - '02' = Display;
    - '03' = Earpiece;
    - '10' to '17' = Additional Card Reader x (0 to 7). Value assigned by ME;
    - ~~'20'~~ '21' to '27' = Channel x (~~0~~ 1 to 7). Value assigned by ME;
    - '81' = UICC;
    - '82' = ME;
    - '83' = Network;
    - All other values are reserved.

3GPP T3 Meeting #16
Seoul, Korea, 13 - 15 November, 2000

Tdoc T3-000646

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

31.111	**CR**	**024**	Current Version:	4.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG-T #10 *list expected approval meeting # here ↑*

for approval [X] for information [ ]

strategic [ ] non-strategic [ ] *(for SMG use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [X] ME [X] UTRAN / Radio [ ] Core Network [ ]

Source: T3 **Date:** 15/11/2000

Subject: Correction to device identity coding

Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	[ ]
A	Corresponds to a correction in an earlier release	[X]
B	Addition of feature	[ ]
C	Functional modification of feature	[ ]
D	Editorial modification	[ ]

Release:

Phase 2	[ ]
Release 96	[ ]
Release 97	[ ]
Release 98	[ ]
Release 99	[ ]
Release 4	[X]

Reason for change: Inconsistency resolution between clauses 8.7 and 8.56.
In clause 8.56 it is mentioned that Channel 0 means no channel available. In Terminal Profile, only 7 channels can be defined (see clause 5.2)

Clauses affected: 8.7

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:


help.doc

<--------- double-click here for help and instructions on how to create a CR.

8.7 Device identities

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    - ~~'20'~~ '21' to '27' = Channel x (~~0~~ 1 to 7). Value assigned by ME;
    - '81' = UICC;
    - '82' = ME;
    - '83' = Network;
    - All other values are reserved.