#### 27.22.4.29 RECEIVE DATA

##### 27.22.4.29.1 RECEIVE DATA (NORMAL)

27.22.4.29.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.1.2 Conformance requirements

The ME shall support the class "e" commands. For sequence 1.2 the support of E-UTRAN, for sequences 1.3 to 1.7 the support of NG-RAN as defined in:

- TS 31.111 [15].

is required in addition.

27.22.4.29.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or

- TERMINAL RESPONSE (ME currently unable to process command); or

- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the UICC after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

27.22.4.29.1.4 Method of test

27.22.4.29.1.4.1 Initial conditions

For sequence 1.1, the ME is connected to the USIM Simulator and the USS.

For sequence 1.2, the ME is connected to the USIM Simulator and the E-USS/NB-SS.

For sequences 1.3 to 1.7, the ME is connected to the USIM Simulator and the NG-SS.

The elementary files are coded as Toolkit default for sequence 1.1.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Data Available Event using the proactive command SET UP EVENT LIST with Data Available event in the event list (ref to ETSI TS 102 241 cl 6.7.1.2).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in 3GPP TS 51.010-1 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in clause 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in clause 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.2.4.1.

For sequence 1.2 the default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs

User login: UserLog

User password: UserPwd

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.6.4.1

Data destination address : Same Data Destination Address as defined in clause 27.22.4.27.6.4.1.

For sequences 1.3 to 1.7 the default NG-RAN UICC, the default NG-RAN parameters, the URSP rules stored in the ME and the Allowed S-NSSAI list as defined in clause 27.22.4.27.8.4.1 is configured in NG-SS are used.

27.22.4.29.1.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

| Step | Direction | MESSAGE / Action | Comments |
| --- | --- | --- | --- |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1 | (1000 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.1 | 200 Bytes |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.1.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.2 | 200 Bytes |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.1.2 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.3 | 200 Bytes |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.1.3 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.4 | 200 Bytes |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.1.4 |  |
| 35 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5 |  |
| 36 | ME → UICC | FETCH |  |
| 37 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.5 | 200 Bytes |
| 38 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.1.5 |  |

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: ME

Event list Data available

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
|  | 01 | 09 |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level

Transport format: UDP

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV | D0 | 42 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 35 |
|  | 07 | 02 | 03 | 04 | 03 | 04 | 1F | 02 | 39 | 02 | 03 | E8 |
|  | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 47 | 70 | 02 | 72 | 73 |
|  | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 4C | 6F | 67 | 0D | 08 |
|  | F4 | 55 | 73 | 65 | 72 | 50 | 77 | 64 | 3C | 03 | 01 | AD |
|  | 9C | 3E | 05 | 21 | 01 | 01 | 01 | 01 |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 03 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 00 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 – 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | 00 |  |

Where XX is the Hex value of the Command number

Expected sequence 1.2 (RECEIVE DATA, already opened channel, E-UTRAN, APN different from default)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.2.1 |  |
| 8 | ME → USER | The ME should not display channel opening information |  |
| 9 | ME → E-USS/NB-SS | PDN CONNECTIVITY REQUEST | [The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"]  [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | E-USS/NB-SS → ME | ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST | [The E-UTRAN parameters are used] |
| 11 | ME → E-USS/NB-SS | ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT |  |
| 12 | ME  UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.2.1 |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.2.1 |  |
| 16 | ME → E-USS/NB-SS | Transfer of 8 Bytes of data to the E-USS/NB-SS through channel 1 | [To retrieve ME's port number at the Access Point defined in the Open Channel command] |
| 17 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.2.1 | [Command performed successfully] |
| 18 | E-USS/NB-SS → ME | Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 | [Sent from the Access Point different to the one of the default EPS bearer] |
| 19 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 1.2.1 | (1000 Bytes of data in the ME buffer) |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.1 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.2.1 | 200 Bytes |
| 23 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.2.1 |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.2.2 | 200 Bytes |
| 27 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.2.2 |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.2.3 | 200 Bytes |
| 31 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.2.3 |  |
| 32 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.4 |  |
| 33 | ME → UICC | FETCH |  |
| 34 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.2.4 | 200 Bytes |
| 35 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.2.4 |  |
| 36 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.2.5 |  |
| 37 | ME → UICC | FETCH |  |
| 38 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.2.5 | 200 Bytes |
| 39 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.2.5 |  |
| 40 | UICC → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1 |  |
| 41 | ME → UICC | FETCH |  |
| 42 | UICC → ME | PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1 |  |
| 43 | ME → UICC | TERMINAL RESPONSE CLOSE CHANNEL 1.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier: empty

Bearer

Bearer type: GPRS / UTRAN packet service / E-UTRAN

Precedence Class: 03

Delay Class: 04

Reliability Class: 02

Peak throughput class: 09

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Network access name: Test12.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level

Transport format: TCP

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 44 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 85 |
|  | 00 | 35 | 07 | 02 | 03 | 04 | 02 | 09 | 1F | 02 | 39 | 02 |
|  | 05 | 78 | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 31 | 32 | 02 |
|  | 72 | 73 | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 4C | 6F | 67 |
|  | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 50 | 77 | 64 | 3C | 03 |
|  | 02 | AD | 9C | 3E | 05 | 21 | 01 | 01 | 01 | 01 |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS / UTRAN packet service / E-UTRAN

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 02

Peak throughput class: 09

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 03 | 04 | 02 | 09 | 1F |
|  | 02 | 39 | 02 | 05 | 78 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

ENVELOPE: EVENT DOWNLOAD - Data available 1.2.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.2.2

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.3

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.4

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.2.5

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

TERMINAL RESPONSE: RECEIVE DATA 1.2.2

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.3

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.4

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.2.5

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.2.5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | 00 |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 41 | 00 | 82 | 02 | 81 | 21 |

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 41 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected sequence 1.3 (RECEIVE DATA, the length of receive data exceeding the buffer size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | The ME successfully registers the NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC  ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1 |  |
| 5 | ME  UICC | FETCH |  |
| 6 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1 |  |
| 7 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1 | If programmable USIM with test applet is used (as defined in clause 27.0),  the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at step 21 (ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1). |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.3.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.3.1 |  |
| 11 | ME → USER | The ME may display channel opening information. |  |
| 12 | ME → NG-SS | PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network. | DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1. |
| 13 | NG-SS → ME | PDU SESSION ESTABLISHMENT ACCEPT |  |
| 14 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.3.1 | [Command performed successfully] |
| 15 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 |  |
| 16 | ME → UICC | FETCH |  |
| 17 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.1 |  |
| 18 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 | [To retrieve ME's port number] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.3.1 | [Command performed successfully] |
| 20 | NG-SS → ME | Transfer of 1900 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 18 |  |
| 21 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1 | (1900 Bytes of data in the ME buffer) |
| 22 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.1 |  |
| 23 | ME → UICC | FETCH |  |
| 24 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.1 | 200 Bytes |
| 25 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.1 |  |
| 26 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.2 |  |
| 27 | ME → UICC | FETCH |  |
| 28 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.2 | 200 Bytes |
| 29 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.2 |  |
| 30 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.3 |  |
| 31 | ME → UICC | FETCH |  |
| 32 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.3 | 200 Bytes |
| 33 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.3 |  |
| 34 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.4 |  |
| 35 | ME → UICC | FETCH |  |
| 36 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.4 | 200 Bytes |
| 37 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.4 |  |
| 38 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.5 |  |
| 39 | ME → UICC | FETCH |  |
| 40 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.5 | 200 Bytes |
| 41 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.5 |  |
| 42 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.6 |  |
| 43 | ME → UICC | FETCH |  |
| 44 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.6 | 200 Bytes |
| 45 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.6 |  |
| 46 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.7 |  |
| 47 | ME → UICC | FETCH |  |
| 48 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.7 | 200 Bytes |
| 49 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.7 |  |
| 50 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 1.3.2 | (1900/500 Bytes of data in the ME buffer) |
| 51 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.8 |  |
| 52 | ME → UICC | FETCH |  |
| 53 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.8 | 200 Bytes |
| 54 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.8 |  |
| 55 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.9 |  |
| 56 | ME → UICC | FETCH |  |
| 57 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.9 | 200 Bytes |
| 58 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.3.9 |  |
| 59 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.3.10 |  |
| 60 | ME → UICC | FETCH |  |
| 61 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.3.10 | 100 Bytes |

PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.3.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 1.3.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.3.1

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.2

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.3

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.4

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.5

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.6

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.7

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.1

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.2

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.3

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.4

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.5

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | FF |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.6

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.6

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | C8 |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.7

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.7

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | 00 |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

ENVELOPE: EVENT DOWNLOAD - Data available 1.3.2

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.3.8

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.9

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.3.10

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 100

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | 64 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.8

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.8

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.9

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.9

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: 64

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | 64 |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.3.10

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.3.10

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 20 21 .. 83 (100 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 64 | 20 | 21 | 22 | .. | 83 | B7 | 01 | 00 |  |  |

Where XX is the Hex value of the Command number

**Expected sequence 1.4 (RECEIVE DATA, receiving 65535 Bytes of data)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Step** | **Direction** | **MESSAGE / Action** | **Comments** |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC  ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1 |  |
| 5 | ME  UICC | FETCH |  |
| 6 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1 |  |
| 7 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1 |  |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.4.1 |  |
| 9 | ME  UICC | FETCH |  |
| 10 | UICC  ME | PROACTIVE COMMAND: OPEN CHANNEL 1.4.1 |  |
| 11 | ME → USER | The ME may display channel opening information. |  |
| 12 | ME → NG-SS | The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network. |  |
| 13 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.4.1 | [Command performed successfully] |
| 14 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.4.1 |  |
| 15 | ME → UICC | FETCH |  |
| 16 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.4.1 |  |
| 17 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 | [To retrieve ME's port number] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.4.1 | [Command performed successfully] |
| 19 | NG-SS → ME | Transfer of 65535 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 20 | ME → UICC | ENVELOPE: EVENT DOWNLOAD – Data available 1.4.1 | (65535 Bytes of data in the ME buffer) |
| 21 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.1 |  |
| 22 | ME → UICC | FETCH |  |
| 23 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.1 | 200 Bytes |
| 24 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.1 |  |
| 25 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.2 |  |
| 26 | ME → UICC | FETCH |  |
| 27 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.2 | 200 Bytes |
| 28 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.2 |  |
| 29 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.3 |  |
| 30 | ME → UICC | FETCH |  |
| 31 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.3 | 200 Bytes |
| 32 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.3 |  |
| 33 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.4 |  |
| 34 | ME → UICC | FETCH |  |
| 35 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.4 | 200 Bytes |
| 36 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.4 |  |
| 37 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.5 |  |
| 38 | ME → UICC | FETCH |  |
| 39 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.5 | 200 Bytes |
| 40 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.5 |  |
| 41 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.6 |  |
| 42 | ME → UICC | FETCH |  |
| 43 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.6 | 200 Bytes |
| 44 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.6 |  |
| 45 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.7 |  |
| 46 | ME → UICC | FETCH |  |
| 47 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.7 | 200 Bytes |
| 48 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.7 |  |
| 49 | Repeat step 20~step 48 45 times | | |
| 50 | ME → UICC | ENVELOPE: EVENT DOWNLOAD – Data available 1.4.47 | (65535/1135 Bytes of data in the ME buffer) |
| 51 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.323 |  |
| 52 | ME → UICC | FETCH |  |
| 53 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.323 | 200 Bytes |
| 54 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.323 |  |
| 55 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.324 |  |
| 56 | ME → UICC | FETCH |  |
| 57 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.324 | 200 Bytes |
| 58 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.324 |  |
| 59 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.325 |  |
| 60 | ME → UICC | FETCH |  |
| 61 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.325 | 200 Bytes |
| 62 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.325 |  |
| 63 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.326 |  |
| 64 | ME → UICC | FETCH |  |
| 65 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.326 | 200 Bytes |
| 66 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.326 |  |
| 67 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.327 |  |
| 68 | ME → UICC | FETCH |  |
| 69 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.327 | 200 Bytes |
| 70 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.327 |  |
| 71 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.4.328 |  |
| 72 | ME → UICC | FETCH |  |
| 73 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.4.328 | 135 Bytes |
| 74 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.4.328 |  |

PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.4.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.4.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.4.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.4.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.4.1

Same as 27.22.4.29.1 ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.2

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.2 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.3

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.3 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.4

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.4 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.5

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.5 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.6

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.6 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.4.7

Same as 27.22.4.29.1 PROACTIVE COMMAND: RECEIVE DATA 1.3.7 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.2

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.2 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.3

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.3 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.4

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.4 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.5

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.5 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.6

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.6 in expected sequence 1.3

TERMINAL RESPONSE: RECEIVE DATA 1.4.7

Same as 27.22.4.29.1 TERMINAL RESPONSE: RECEIVE DATA 1.3.7 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.4.47

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.4.323

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.324

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.325

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.326

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.327

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.4.328

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 87

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | 87 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.4.327

Logically:

Command details

* Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.4.327
* Command type: RECEIVE DATA
* Command qualifier: RFU

Device identities

* Source device: ME
* Destination device: UICC

Result

* General Result: Command performed successfully
* Channel Data : 20 21 .. E7 (200 Bytes of data)
* Channel data length: 87

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | 87 |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.4.328

Logically:

Command details

* Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.4.328
* Command type: RECEIVE DATA
* Command qualifier: RFU

Device identities

* Source device: ME
* Destination device: UICC

Result

* General Result: Command performed successfully
* Channel Data : 00 01 .. 86 (135 Bytes of data)
* Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | 87 | 00 | 01 | 02 | .. | 86 | B7 | 01 | 00 |  |

Where XX is the Hex value of the Command number

Expected sequence 1.5 (RECEIVE DATA, send refresh after receiving data)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC  ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.5.1 |  |
| 5 | ME  UICC | FETCH |  |
| 6 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.5.1 |  |
| 7 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.5.1 |  |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.5.1 |  |
| 11 | ME → USER | The ME may display channel opening information. |  |
| 12 | ME → NG-SS | The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network. |  |
| 13 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.5.1 | [Command performed successfully] |
| 14 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.5.1 |  |
| 15 | ME → UICC | FETCH |  |
| 16 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.5.1 |  |
| 17 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 | [To retrieve ME's port number] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.5.1 | [Command performed successfully] |
| 19 | NG-SS → ME | Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17 |  |
| 20 | ME → UICC | ENVELOPE: EVENT DOWNLOAD – Data available 1.5.1 | (1000 Bytes of data in the ME buffer) |
| 21 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.1 |  |
| 22 | ME → UICC | FETCH |  |
| 23 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.5.1 | 200 Bytes |
| 24 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.5.1 |  |
| 25 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.2 |  |
| 26 | ME → UICC | FETCH |  |
| 27 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.5.2 | 200 Bytes |
| 28 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.5.2 |  |
| 29 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.3 |  |
| 30 | ME → UICC | FETCH |  |
| 31 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.5.3 | 200 Bytes |
| 32 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.5.3 |  |
| 33 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.4 |  |
| 34 | ME → UICC | FETCH |  |
| 35 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.5.4 | 200 Bytes |
| 36 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.5.4 |  |
| 37 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.5.5 |  |
| 38 | ME → UICC | FETCH |  |
| 39 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.5.5 | 200 Bytes |
| 40 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.5.5 |  |
| 41 | UICC → ME | PROACTIVE COMMAND PENDING: REFRESH 1.5.1 |  |
| 42 | ME → UICC | FETCH |  |
| 43 | UICC → ME | PROACTIVE COMMAND: REFRESH 1.5.1 |  |
| 44 | ME → UICC | ME performs UICC reset | Both cold and warm resets are allowed |
| 45 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell again. |  |
| 46 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 47 | UICC  ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.2 |  |
| 48 | ME → UICC | FETCH |  |
| 49 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.5.2 |  |
| 50 | ME → USER | The ME may display channel opening information. |  |
| 51 | ME → NG-SS | The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network. |  |
| 52 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.5.2 | [Command performed successfully] |

PROACTIVE COMMAND: SET UP EVENT LIST 1.5.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.5.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.5.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.5.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.5.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.5.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.5.1

Same as 27.22.4.29.1 ENVELOPE: EVENT DOWNLOAD - Data available 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: RECEIVE DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.5.2

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.3

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.4

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: RECEIVE DATA 1.5.5

Logically:

Command details

Command number: any value between 1 to 254

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | XX | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

TERMINAL RESPONSE: RECEIVE DATA 1.5.2

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.3

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.4

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

Where XX is the Hex value of the Command number

TERMINAL RESPONSE: RECEIVE DATA 1.5.5

Logically:

Command details

Command number: same value as the command number in TERMINAL RESPONSE: RECEIVE DATA 1.5.5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | XX | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 20 | 21 | 22 | .. | E7 | B7 | 01 | 00 |  |

Where XX is the Hex value of the Command number

PROACTIVE COMMAND: REFRESH 1.5.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: UICC RESET

Device identities

Source device: UICC

Destination device: ME

Refresh enforcement policy

Refresh enforcement policy value:     Force immediate REFRESH even if the terminal is busy on data call

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 01 | 04 | 82 | 02 | 81 | 82 |
|  | A3 | 01 | 02 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: OPEN CHANNEL 1.5.2

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.5.2

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

Expected sequence 1.6 (Void)

Expected sequence 1.7 (RECEIVE DATA, 2 consecutive RECEIVE DATA)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC  ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.7.1 |  |
| 5 | ME  UICC | FETCH |  |
| 6 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.7.1 |  |
| 7 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.7.1 |  |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.7.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.7.1 |  |
| 11 | ME → USER | The ME may display channel opening information. |  |
| 12 | ME → NG-SS | The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network. |  |
| 13 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.7.1 | [Command performed successfully] |
| 14 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.7.1 |  |
| 15 | ME → UICC | FETCH |  |
| 16 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.7.1 |  |
| 17 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 | [To retrieve ME's port number] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.7.1 | [Command performed successfully] |
| 19 | NG-SS → ME | Transfer of 200 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17 |  |
| 20 | ME → UICC | ENVELOPE: EVENT DOWNLOAD – Data available 1.7.1 | (200 Bytes of data in the ME buffer) |
| 21 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.7.1 |  |
| 22 | ME → UICC | FETCH |  |
| 23 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.7.1 | 200 Bytes |
| 24 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.7.1 |  |
| 25 | NG-SS → ME | Transfer of 200 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 17 |  |
| 26 | ME → UICC | ENVELOPE: EVENT DOWNLOAD – Data available 1.7.2 | (200 Bytes of data in the ME buffer) |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.7.2 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.7.2 | 200 Bytes |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.7.2 |  |

PROACTIVE COMMAND: SET UP EVENT LIST 1.7.1

Same as PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

TERMINAL RESPONSE: SET UP EVENT LIST 1.7.1

Same as TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 in expected sequence 1.1

PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 1.7.1

Same as 27.22.4.29.1 PROACTIVE COMMAND: SEND DATA 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: SEND DATA 1.7.1

Same as 27.22.4.29.1 TERMINAL RESPONSE: SEND DATA 1.3.1 in expected sequence 1.3

ENVELOPE: EVENT DOWNLOAD - Data available 1.7.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.7.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 1.7.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | 00 |  |

ENVELOPE: EVENT DOWNLOAD - Data available 1.7.2

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.7.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 1.7.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: 00

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | 00 |  |

27.22.4.29.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

##### 27.22.4.29.2 RECEIVE DATA (support of Text Attribute)

27.22.4.29.2.1 RECEIVE DATA (support of Text Attribute – Left Alignment)

27.22.4.29.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.1.3 Test purpose

To verify that the ME shall display the alpha identifier according to the left alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.1.4 Method of test

27.22.4.29.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Sames Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.1.4.2 Procedure

Expected sequence 2.1 (RECEIVE DATA, with Text Attribute – Left Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1ENVELOPE (Data Available) | (400 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.1.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.1.1 | 200 Bytes with alpha identifier is displayed with left alignment |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.1.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.1.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.1.2 | 200 Bytes with alpha identifier shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.1.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 2.1.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.1.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.1.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1.

27.22.4.29.2.2 RECEIVE DATA (support of Text Attribute – Center Alignment)

27.22.4.29.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.2.3 Test purpose

To verify that the ME shall display the alpha identifier according to the center alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.2.4 Method of test

27.22.4.29.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.2.4.2 Procedure

Expected sequence 2.2 (RECEIVE DATA, with Text Attribute – Center Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (400 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.2.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.2.1 | 200 Bytes with alpha identifier is displayed with center alignment |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.2.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.2.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.2.2 | 200 Bytes with alpha identifier shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.2.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.2.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Center Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 01 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.2.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.2.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.2.

27.22.4.29.2.3 RECEIVE DATA (support of Text Attribute – Right Alignment)

27.22.4.29.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.3.3 Test purpose

To verify that the ME shall display the alpha identifier according to the right alignment text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.3.4 Method of test

27.22.4.29.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.3.4.2 Procedure

Expected sequence 2.3 (RECEIVE DATA, with Text Attribute – Right Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (400 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.3.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.3.1 | 200 Bytes with alpha identifier is displayed with right alignment |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.3.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.3.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.3.2 | 200 Bytes with alpha identifier shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/21, no alignment change will take place |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.3.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.3.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Right Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 02 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.3.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.3.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.3.

27.22.4.29.2.4 RECEIVE DATA (support of Text Attribute – Large Font Size)

27.22.4.29.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.4.3 Test purpose

To verify that the ME shall display the alpha identifier according to the large font size text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.4.4 Method of test

27.22.4.29.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.4.4.2 Procedure

Expected sequence 2.4 (RECEIVE DATA, with Text Attribute – Large Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (800 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.4.1 | 200 Bytes with alpha identifier is displayed with large font size |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.4.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.4.2 | 200 Bytes with alpha identifier is displayed with normal font size |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.4.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.4.1 | 200 Bytes with alpha identifier is displayed with large font size |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.4.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.4.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.4.3 | 200 Bytes with alpha identifier is displayed with normal font size |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.4.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.4.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Large Font, Bold On, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 04 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.4.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.4.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.4.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.4.

27.22.4.29.2.5 RECEIVE DATA (support of Text Attribute – Small Font Size)

27.22.4.29.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.5.3 Test purpose

To verify that the ME shall display the alpha identifier according to small font size the text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.5.4 Method of test

27.22.4.29.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.5.4.2 Procedure

Expected sequence 2.5 (RECEIVE DATA, with Text Attribute – Small Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (800 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.5.1 | 200 Bytes with alpha identifier is displayed with small font size |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.5.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.5.2 | 200 Bytes with alpha identifier is displayed with normal font size |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.5.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.5.1 | 200 Bytes with alpha identifier is displayed with small font size |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.5.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.5.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.5.3 | 200 Bytes with alpha identifier is displayed with normal font size |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.5.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.5.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Small Font, Bold On, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 08 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.5.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.5.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.5.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.5.

27.22.4.29.2.6 RECEIVE DATA (support of Text Attribute – Bold On)

27.22.4.29.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.6.3 Test purpose

To verify that the ME shall display the alpha identifier according to the bold text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.6.4 Method of test

27.22.4.29.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.6.4.2 Procedure

Expected sequence 2.6 (RECEIVE DATA, with Text Attribute – Bold On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (800 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.6.1 | 200 Bytes with alpha identifier is displayed with bold on |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.6.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.6.2 | 200 Bytes with alpha identifier is displayed with bold off |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.6.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.6.1 | 200 Bytes with alpha identifier is displayed with bold on |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.6.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.6.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.6.3 | 200 Bytes with alpha identifier is displayed with bold off |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.6.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.6.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold On, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 10 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.6.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.6.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.6.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.6.

27.22.4.29.2.7 RECEIVE DATA (support of Text Attribute – Italic On)

27.22.4.29.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.7.3 Test purpose

To verify that the ME shall display the alpha identifier according to the italic text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.7.4 Method of test

27.22.4.29.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.7.4.2 Procedure

Expected sequence 2.7 (RECEIVE DATA, with Text Attribute – Italic On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1ENVELOPE | (800 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.7.1 | 200 Bytes with alpha identifier is displayed with italic on |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.7.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.7.2 | 200 Bytes with alpha identifier is displayed with italic off |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.7.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.7.1 | 200 Bytes with alpha identifier is displayed with italic on |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.7.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.7.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.7.3 | 200 Bytes with alpha identifier is displayed with italic off |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.7.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.7.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 20 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.7.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.7.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.7.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.7.

27.22.4.29.2.8 RECEIVE DATA (support of Text Attribute – Underline On)

27.22.4.29.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.8.3 Test purpose

To verify that the ME shall display the alpha identifier according to the underline text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.8.4 Method of test

27.22.4.29.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e. condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.8.4.2 Procedure

Expected sequence 2.8 (RECEIVE DATA, with Text Attribute – Underline On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (800 kBytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.8.1 | 200 Bytes with alpha identifier is displayed with underline on |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.8.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.8.2 | 200 Bytes with alpha identifier is displayed with underline off |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.8.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.8.1 | 200 Bytes with alpha identifier is displayed with underline on |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.8.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.8.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.8.3 | 200 Bytes with alpha identifier is displayed with underline off |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.8.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.8.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 40 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.8.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.8.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.8.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.8.

27.22.4.29.2.9 RECEIVE DATA (support of Text Attribute – Strikethrough On)

27.22.4.29.2.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.9.3 Test purpose

To verify that the ME shall display the alpha identifier according to the strikethrough text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.9.4 Method of test

27.22.4.29.2.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.9.4.2 Procedure

Expected sequence 2.9 (RECEIVE DATA, with Text Attribute – Strikethrough On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 800 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (800 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.9.1 | 200 Bytes with alpha identifier is displayed with strikethrough on |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.9.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.9.2 | 200 Bytes with alpha identifier is displayed with strikethrough off |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.9.1 |  |
| 27 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.1 |  |
| 28 | ME → UICC | FETCH |  |
| 29 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.9.1 | 200 Bytes with alpha identifier is displayed with strikethrough on |
| 30 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.9.1 |  |
| 31 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.9.3 |  |
| 32 | ME → UICC | FETCH |  |
| 33 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.9.3 | 200 Bytes with alpha identifier is displayed with strikethrough off |
| 34 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.9.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.9.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 80 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.9.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.9.3

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 3"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 33 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.9.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.9.

27.22.4.29.2.10 RECEIVE DATA (support of Text Attribute – Foreground and Background Colour)

27.22.4.29.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.29.2.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.29.2.10.3 Test purpose

To verify that the ME shall display the alpha identifier according to the foreground and background colour text attribute configuration in the RECEIVE DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.29.2.10.4 Method of test

27.22.4.29.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The PROACTIVE COMMAND: SEND DATA 1.1.1 shall be performed successfully to detect the ME's port number, which has to be addressed by the network simulator when data has to be transmitted to the card. The corresponding Terminal Response shall be TERMINAL RESPONSE: SEND DATA 1.1.1.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.29.2.10.4.2 Procedure

Expected sequence 2.10 (RECEIVE DATA, with Text Attribute – Foreground and Background Colour)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 PENDING |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 |  |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USER | The ME may display channel opening information |  |
| 9 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 10 | USS → ME | PDP context activation accept |  |
| 11 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 15 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 | [To retrieve ME's port number] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |
| 17 | USS → ME | Transfer of 400 Bytes data to the ME through channel 1 using the ME's port number, which was retrieved in step 15 |  |
| 18 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1 | (400 Bytes of data in the ME buffer) |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.10.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.10.1 | 200 Bytes with alpha identifier is displayed with foreground and background colour |
| 22 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.10.1 |  |
| 23 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 2.10.2 |  |
| 24 | ME → UICC | FETCH |  |
| 25 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 2.10.2 | 200 Bytes with alpha identifier is displayed with ME's default foreground and background colour |
| 26 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 2.10.1 |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Same as PROACTIVE COMMAND: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

TERMINAL RESPONSE: SEND DATA 1.1.1

Same as TERMINAL RESPONSE: SEND DATA 1.1.1 in clause 27.22.4.29.1.4.2.

ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1

Same as cl. 27.22.4.29.2.1.4.2, ENVELOPE: EVENT DOWNLOAD - Data available 2.1.1.

PROACTIVE COMMAND: RECEIVE DATA 2.10.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 1"

Channel Data Length

Channel Data Length: 200

Text Attribute

Formatting position: 0

Formatting length: 14

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 31 | B7 | 01 | C8 | D0 | 04 | 00 | 0E | 00 | B4 |

PROACTIVE COMMAND: RECEIVE DATA 2.10.2

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Receive Data 2"

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | 85 |
|  | 0E | 52 | 65 | 63 | 65 | 69 | 76 | 65 | 20 | 44 | 61 | 74 |
|  | 61 | 20 | 32 | B7 | 01 | C8 |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 2.10.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

27.22.4.29.2.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.10.

#### 27.22.4.30 SEND DATA

##### 27.22.4.30.1 SEND DATA (normal)

27.22.4.30.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or

- TERMINAL RESPONSE (ME currently unable to process command); or

- TERMINAL RESPONSE (Bearer Independent Protocol Error);

- TERMINAL RESPONSE (Proactive USIM session terminated by the user);

to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

27.22.4.30.1.4 Method of test

27.22.4.30.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27

The following Bearer Parameters used are those defined in the default Test PDP context for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.1.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.1.1 |  |
| 11 | ME → USS | Transfer of 8 Bytes of data to the USS through channel 1 |  |
| 12 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level

Transport format: UDP

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV | D0 | 42 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 35 |
|  | 07 | 02 | 03 | 04 | 03 | 04 | 1F | 02 | 39 | 02 | 03 | E8 |
|  | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 47 | 70 | 02 | 72 | 73 |
|  | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 4C | 6F | 67 | 0D | 08 |
|  | F4 | 55 | 73 | 65 | 72 | 50 | 77 | 64 | 3C | 03 | 01 | AD |
|  | 9C | 3E | 05 | 21 | 01 | 01 | 01 | 01 |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 03 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 00 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

Expected sequence 1.2 (SEND DATA, Store mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.2.1 | Send 500 Bytes of data (200 + 200 + 100) |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.2.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.2.2 | [200 Bytes] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.2.2 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.3 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA (Immediate mode) 1.2.3 | [100 Bytes] |
| 19 | ME → USS | Transfer of 500 Bytes of data to the USS through channel 1 |  |
| 20 | ME → UICC | TERMINAL RESPONSE: SEND DATA (Immediate mode) 1.2.3 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 00 | 01 | .. | C7 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | C8 | C9 | .. | FF | 00 | 01 | .. | 8F |  |

TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 6F | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 64 | 90 | 91 | .. | F3 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packet of 200 Bytes |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | [200 Bytes] |
| 27 | ME → USS | Transfer of 1000 Bytes of data to the USS through channel 1 |  |
| 28 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | ... | C7 |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.3.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | C8 | C9 | CA | ... | FF | 00 | 02 | .. | 8F |

TERMINAL RESPONSE: SEND DATA 1.3.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.3.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 90 | 91 | .. | FF | 00 | 01 | .. | 57 |  |

TERMINAL RESPONSE: SEND DATA 1.3.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.3.4

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 58 | 59 | .. | FF | 00 | 01 | .. | 1F |  |

TERMINAL RESPONSE: SEND DATA 1.3.4

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: 200 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | C8 |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 20 21 .. E7 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 20 | 21 | .. | E7 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

Expected sequence 1.4 (SEND DATA, 2 consecutive SEND DATA Store mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packet of 200 Bytes |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | … |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | [200 Bytes] |
| 27 | ME → USS | Transfer of 1000 Bytes of data to the USS through channel 1 |  |
| 28 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5 | [Command performed successfully] |
| 29 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 |  |
| 30 | ME → UICC | FETCH |  |
| 31 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1 | Send 1000 Bytes of data by packet of 200 Bytes |
| 32 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 33 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 |  |
| 34 | ME → UICC | FETCH |  |
| 35 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 36 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 37 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 |  |
| 38 | ME → UICC | FETCH |  |
| 39 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 40 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 41 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 |  |
| 42 | ME → UICC | FETCH |  |
| 43 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 44 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 45 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | … |
| 46 | ME → UICC | FETCH |  |
| 47 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5 | [200 Bytes] |
| 48 | ME → USS | Transfer of 1000 Bytes of data to the USS through channel 1 |  |
| 49 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5 | [Command performed successfully] |

Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.5.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.5.1 |  |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.5.1 | [Invalid channel number] |

PROACTIVE COMMAND: SEND DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 2

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 22 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Bearer Independent Protocol error (3A)

Additional Result: Channel identifier not valid (03)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 02 | 3A |
|  | 03 |  |  |  |  |  |  |  |  |  |  |  |

Expected sequence 1.6 Void

27.22.4.30.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

##### 27.22.4.30.2 SEND DATA (support of Text Attribute)

27.22.4.30.2.1 SEND DATA (support of Text Attribute – Left Alignment)

27.22.4.30.2.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.1.3 Test purpose

To verify that the ME shall display the alpha identifier according to the left alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.1.4 Method of test

27.22.4.30.2.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.1.4.2 Procedure

Expected sequence 2.1 (SEND DATA with Text Attribute – Left Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.1.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.1.1 | [alpha identifier shall be displayed with left alignment] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.1.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.1.2 | [Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.1.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1.

27.22.4.30.2.2 SEND DATA (support of Text Attribute – Center Alignment)

27.22.4.30.2.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.2.3 Test purpose

To verify that the ME shall display the alpha identifier according to the center alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.2.4 Method of test

27.22.4.30.2.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.2.4.2 Procedure

Expected sequence 2.2 (SEND DATA with Text Attribute – Center Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.2.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.2.1 | [alpha identifier shall be displayed with center alignment] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.2.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.2.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.2.2 | [Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Center Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 01 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.2.

27.22.4.30.2.3 SEND DATA (support of Text Attribute – Right Alignment)

27.22.4.30.2.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.3.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.3.3 Test purpose

To verify that the ME shall display the alpha identifier according to the right alignment text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.3.4 Method of test

27.22.4.30.2.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.3.4.2 Procedure

Expected sequence 2.3 (SEND DATA with Text Attribute – Right Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.3.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.3.1 | [alpha identifier shall be displayed with right alignment] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.3.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.3.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.3.2 | [Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/22, no alignment change will take place] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.3.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Right Alignment, Normal Font, Bold On, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 02 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.3.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.3.

27.22.4.30.2.4 SEND DATA (support of Text Attribute – Large Font Size)

27.22.4.30.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.4.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.4.3 Test purpose

To verify that the ME shall display the alpha identifier according to the large font size text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.4.4 Method of test

27.22.4.30.2.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.4.4.2 Procedure

Expected sequence 2.4 (SEND DATA with Text Attribute – Large Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.4.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.4.1 | [alpha identifier shall be displayed with large font size] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.4.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.4.2 | [alpha identifier shall be displayed with normal font size] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.4.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.4.1 | [alpha identifier shall be displayed with large font size] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.4.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.4.3 | [alpha identifier shall be displayed with normal font size] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.4.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Large Font, Bold On, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 04 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.4.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.4.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.4.

27.22.4.30.2.5 SEND DATA (support of Text Attribute – Small Font Size)

27.22.4.30.2.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.5.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.5.3 Test purpose

To verify that the ME shall display the alpha identifier according to the small font size text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.5.4 Method of test

27.22.4.30.2.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.5.4.2 Procedure

Expected sequence 2.5 (SEND DATA with Text Attribute – Small Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.5.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.5.1 | [alpha identifier shall be displayed with small font size] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.5.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.5.2 | [alpha identifier shall be displayed with normal font size] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.5.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.5.1 | [alpha identifier shall be displayed with small font size] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.5.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.5.3 | [alpha identifier shall be displayed with normal font size] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.5.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Small Font, Bold On, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 08 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.5.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.5.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.5.

27.22.4.30.2.6 SEND DATA (support of Text Attribute – Bold On)

27.22.4.30.2.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.6.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.6.3 Test purpose

To verify that the ME shall display the alpha identifier according to the bold text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.6.4 Method of test

27.22.4.30.2.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.6.4.2 Procedure

Expected sequence 2.6 (SEND DATA with Text Attribute – Bold On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.6.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.6.1 | [alpha identifier shall be displayed with Bold on] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.6.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.6.2 | [alpha identifier shall be displayed with bold off] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.6.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.6.1 | [alpha identifier shall be displayed with bold on] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.6.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.6.3 | [alpha identifier shall be displayed with bold off] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.6.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold On , Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 10 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.6.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.6.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.6.

27.22.4.30.2.7 SEND DATA (support of Text Attribute – Italic On)

27.22.4.30.2.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.7.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.7.3 Test purpose

To verify that the ME shall display the alpha identifier according to the italic text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.7.4 Method of test

27.22.4.30.2.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.7.4.2 Procedure

Expected sequence 2.7 (SEND DATA with Text Attribute – Italic On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.7.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.7.1 | [alpha identifier shall be displayed with Italic on] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.7.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.7.2 | [alpha identifier shall be displayed with italic off] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.7.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.7.1 | [alpha identifier shall be displayed with italic on] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.7.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.7.3 | [alpha identifier shall be displayed with italic off] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.7.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.7.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic On, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 20 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.7.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.7.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.7.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.7.

27.22.4.30.2.8 SEND DATA (support of Text Attribute – Underline On)

27.22.4.30.2.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.8.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.8.3 Test purpose

To verify that the ME shall display the alpha identifier according to the underline text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.8.4 Method of test

27.22.4.30.2.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.8.4.2 Procedure

Expected sequence 2.8 (SEND DATA with Text Attribute – Underline On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.8.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.8.1 | [alpha identifier shall be displayed with underline on] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.8.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.8.2 | [alpha identifier shall be displayed with underline off] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.8.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.8.1 | [alpha identifier shall be displayed with underline on] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.8.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.8.3 | [alpha identifier shall be displayed with underline off] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.8.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.8.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline On, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 40 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.8.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.8.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.8.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.8.

27.22.4.30.2.9 SEND DATA (support of Text Attribute – Strikethrough On)

27.22.4.30.2.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.9.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.9.3 Test purpose

To verify that the ME shall display the alpha identifier according to the strikethrough text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.9.4 Method of test

27.22.4.30.2.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.9.4.2 Procedure

Expected sequence 2.9 (SEND DATA with Text Attribute – Strikethrough On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.9.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.9.1 | [alpha identifier shall be displayed with strikethrough on] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.9.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.9.2 | [alpha identifier shall be displayed with strikethrough off] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1 | [Command performed successfully] |
| 16 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.9.1 |  |
| 17 | ME → UICC | FETCH |  |
| 18 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.9.1 | [alpha identifier shall be displayed with strikethrough on] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1 | [Command performed successfully] |
| 20 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.9.3 |  |
| 21 | ME → UICC | FETCH |  |
| 22 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.9.3 | [alpha identifier shall be displayed with strikethrough off] |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.9.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.9.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough On

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 80 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.9.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.9.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 3"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 33 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.9.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.9.

27.22.4.30.2.10 SEND DATA (support of Text Attribute – Foreground and Background Colour)

27.22.4.30.2.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.2.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

- TS 31.111 [15].

27.22.4.30.2.10.3 Test purpose

To verify that the ME shall display the alpha identifier according to the foreground and background colour text attribute configuration in the SEND DATA proactive command and send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC.

27.22.4.30.2.10.4 Method of test

27.22.4.30.2.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 34.108 [12], for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.2.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.2.4.1.

27.22.4.30.2.10.4.2 Procedure

Expected sequence 2.10 (SEND DATA with Text Attribute – Foreground and Background Colour)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information |  |
| 5 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | USS → ME | PDP context activation accept |  |
| 7 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.10.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.10.1 | [alpha identifier shall be displayed with foreground and background colour according to the text attribute configuration] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.10.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 2.10.2 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: SEND DATA 2.10.2 | [alpha identifier shall be displayed with ME's default foreground and background colour] |
| 15 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 2.10.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 2.10.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 1"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Text Attribute

Formatting position: 0

Formatting length: 11

Formatting mode: Left Alignment, Normal Font, Bold Off, Italic Off, Underline Off, Strikethrough Off

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 31 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | D0 | 04 |
|  | 00 | 0B | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 2.10.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Alpha Identifier "Send Data 2"

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 61 | 74 | 61 | 20 | 32 |
|  | B6 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |

TERMINAL RESPONSE: SEND DATA 2.10.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.2.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.10.

##### 27.22.4.30.3 SEND DATA (E-UTRAN)

27.22.4.30.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.3.2 Conformance requirements

The ME shall support the class "e" commands and E-UTRAN as defined in:

- TS 31.111 [15].

27.22.4.30.3.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

To verify that the ME uses the default EPS bearer as requested in the Open Channel Command.

27.22.4.30.3.4 Method of test

27.22.4.30.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs

User login: UserLog

User password: UserPwd

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in 27.22.4.27.6.4.1

Data destination address : Same Data Destination Address as defined in 27.22.4.27.6.4.1.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.30.3.4.2 Procedure

Expected sequence 3.1 (SEND DATA, E-UTRAN, Defaults EPS bearer, immediate mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 3.1.1 |  |
| 4 | ME → USER | The ME may display channel opening information | [The user shall confirm the channel opening if required] |
| 5 | ME → E-USS/NB-SS | No PDN connectivity request  PDN CONNECTIVITY REQUEST is sent if the ME supports A.1/173 AND NOT A.1/174. | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B | [Command performed successfully]  If the ME supports A.1/173 only OPEN CHANNEL 3.1.1A shall be sent. |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 3.1.1 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 3.1.1 |  |
| 10 | ME → E-USS/NB-SS | Transfer of 8 Bytes of data to the USS through channel 1 |  |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 3.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.1.1 |  |
| 13 | ME → UICC | FETCH |  |
| 14 | UICC → ME | PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1 |  |
| 15 | ME → UICC | TERMINAL RESPONSE CLOSE CHANNEL 3.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 3.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer

Bearer type: Default bearer for requested transport layer

Buffer

Buffer size: 1400

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level

Transport format: TCP, UICC in client mode, remote connection

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 30 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 35 |
|  | 01 | 03 | 39 | 02 | 05 | 78 | 0D | 08 | F4 | 55 | 73 | 65 |
|  | 72 | 4C | 6F | 67 | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 50 |
|  | 77 | 64 | 3C | 03 | 02 | AD | 9C | 3E | 05 | 21 | 01 | 01 |
|  | 01 | 01 |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer

Bearer type: Default bearer for requested transport layer

Buffer

Buffer size: 1400

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 01 | 03 | 39 | 02 | 05 | 78 |  |

TERMINAL RESPONSE: OPEN CHANNEL 3.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer

Bearer type: E-UTRAN / mapped UTRAN packet service

QCI 9

Maximum bit rate for uplink: 64 kbps

Maximum bit rate for downlink: 64 kbps

Guaranteed bit rate for uplink: 64 kbps

Guaranteed bit rate for downlink: 64 kbps

Maximum bit rate for uplink (extended): 0

Maximum bit rate for downlink (extended): 0

Guaranteed bit rate for uplink (extended): 0

Guaranteed bit rate for downlink (extended): 0

PDN Type: IP

Buffer

Buffer size: 1400

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 0B | 0B | 09 | 40 | 40 | 40 | 40 |
|  | 00 | 00 | 00 | 00 | 02 | 39 | 02 | 05 | 78 |  |  |  |

PROACTIVE COMMAND: SEND DATA 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 41 | 00 | 82 | 02 | 81 | 21 |

TERMINAL RESPONSE: CLOSE CHANNEL 3.1.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 41 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected sequence 3.2 (SEND DATA, E-UTRAN, APN different from default APN, Store mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 3.2.1 | If the ME supports A.1/173 AND NOT A.1/174 only one APN will be activated in step 5. |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 3.2.1 |  |
| 4 | ME → USER | The ME should not display channel opening information |  |
| 5 | ME → E-USS/NB-SS | PDN CONNECTIVITY REQUEST | [The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"]  [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 6 | E-USS/NB-SS → ME | ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST | [The E-UTRAN parameters are used] |
| 7 | ME → E-USS/NB-SS | ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT |  |
| 8 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 3.2.1 | [Command performed successfully] |
| 9 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 3.2.1 |  |
| 10 | ME → UICC | FETCH |  |
| 11 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 3.2.1 | Send 500 Bytes of data (200 + 200 + 100) |
| 12 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 3.2.1 | [Command performed successfully] |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 3.2.2 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 3.2.2 | [200 Bytes] |
| 16 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 3.2.2 | [Command performed successfully] |
| 17 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 3.2.3 |  |
| 18 | ME → UICC | FETCH |  |
| 19 | UICC → ME | PROACTIVE COMMAND: SEND DATA (Immediate mode) 3.2.3 | [100 Bytes] |
| 20 | ME → E-USS/NB-SS | Transfer of 500 Bytes of data to the USS through channel 1 |  |
| 21 | ME → UICC | TERMINAL RESPONSE: SEND DATA (Immediate mode) 3.2.3 | [Command performed successfully] |
| 22 | UICC → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 3.2.1 |  |
| 23 | ME → UICC | FETCH |  |
| 24 | UICC → ME | PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1 |  |
| 25 | ME → UICC | TERMINAL RESPONSE CLOSE CHANNEL 3.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 3.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier: empty

Bearer

Bearer type: GPRS / UTRAN packet service / E-UTRAN

Precedence Class: 03

Delay Class: 04

Reliability Class: 02

Peak throughput class: 09

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Network access name: Test12.rs

Text String: "UserLog" (User login)

Text String: "UserPwd" (User password)

UICC/ME interface transport level

Transport format: TCP

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 44 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 85 |
|  | 00 | 35 | 07 | 02 | 03 | 04 | 02 | 09 | 1F | 02 | 39 | 02 |
|  | 05 | 78 | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 31 | 32 | 02 |
|  | 72 | 73 | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 4C | 6F | 67 |
|  | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 50 | 77 | 64 | 3C | 03 |
|  | 02 | AD | 9C | 3E | 05 | 21 | 01 | 01 | 01 | 01 |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 3.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS / UTRAN packet service / E-UTRAN

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 02

Peak throughput class: 09

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 03 | 04 | 02 | 09 | 1F |
|  | 02 | 39 | 02 | 05 | 78 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 3.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 00 | 01 | .. | C7 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 3.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 3.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | C8 | C9 | .. | FF | 00 | 01 | .. | 8F |  |

TERMINAL RESPONSE: SEND DATA 3.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 3.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 6F | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 64 | 90 | 91 | .. | F3 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 3.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: CLOSE CHANNEL 3.2.1

Same as PROACTIVE COMMAND: CLOSE CHANNEL 3.1.1 from sequence 1.1.

TERMINAL RESPONSE: CLOSE CHANNEL 3.2.1

Same as Terminal Response: CLOSE CHANNEL 3.1.1 from sequence 1.1.

27.22.4.30.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.2.

##### 27.22.4.30.4 SEND DATA (NG-RAN)

27.22.4.30.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.30.4.2 Conformance requirements

The ME shall support the class "e" commands and NG-RAN as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.27 and 6.6.27, clause 8.6, clause 8.7, clause 9.2, clause 8.2, clause 8.15, clause 8.52, clause 8.59, clause 8.61,

- TS 24.501 [40], clauses 6.2.2 and 6.2.3,

- TS 23.501 [41], clauses 5.15.5.2 and 5.15.5.3,

- TS 23.503 [42], clause 6.6.2,

- TS 24.526 [43], clause 4.1, 4.2.2, 5.2 and 5.15.5.3,

- TS 23.003 [44], clause 9A.

27.22.4.30.4.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the UICC is the result of the ME and the network capabilities against requested parameters by the UICC.

27.22.4.30.4.4 Method of test

27.22.4.30.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default NG-RAN UICC, the default NG-RAN parameters and the following URSP rules stored in the ME are used:

URSP:

Rule Precedence =1

Traffic Descriptor:

DNN=TestGp.rs

Route Selection Descriptor:

Precedence=1

Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: MBB, SD: 010102)

SSC Mode Selection: SSC Mode 1

Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: \*

Route Selection Descriptor:

Precedence =1

Network Slice Selection, S-NSSAI: 01 01 01 01 (ST: MBB, SD: 010101)

SSC Mode Selection: SSC Mode 1

DNN Selection: internet

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01', '01 01 01 02'and '01 01 01 03'

For sequence 4.2 the NG-SS shall be able to support 2 active PDU sessions at the same time.

The Channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

Prior to test case execution the apparatus supplier shall have provided the "Preferred buffer size supported by the terminal for Open Channel command" as requested in table A.2/29.

27.22.4.30.4.4.2 Procedure

Expected sequence 4.1 (SEND DATA, NG-RAN, bearer type '03' – Default PDU Session, immediate mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 4.1.1 |  |
| 7 | ME → USER | The ME may display channel opening information. |  |
| 8 | ME → NG-SS | The terminal shall not send a PDU SESSION ESTABLISHMENT REQUEST to the network. |  |
| 9 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 4.1.1 | [Command performed successfully] |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 4.1.1 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 4.1.1 |  |
| 10 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 |  |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 4.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 4.1.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.1.1 in expected sequence 8.1

TERMINAL RESPONSE: OPEN CHANNEL 4.1.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.1.1 in expected sequence 8.1

PROACTIVE COMMAND: SEND DATA 4.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 4.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

Expected sequence 4.2 (SEND DATA, NG-RAN, bearer type '0C', Store mode)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | ME successfully REGISTER with NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 4.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL4.2.1 |  |
| 7 | ME → USER | The ME may display channel opening information. |  |
| 8 | ME → NG-SS | PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network. | DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1. |
| 9 | NG-SS → ME | PDU SESSION ESTABLISHMENT ACCEPT |  |
| 10 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 4.2.1 | [Command performed successfully] |
| 11 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA4.2.1 |  |
| 12 | ME → UICC | FETCH |  |
| 13 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 4.2.1 | Send 500 Bytes of data (200 + 200 + 100) |
| 14 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 4.2.1 | [Command performed successfully] |
| 15 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 4.2.2 |  |
| 16 | ME → UICC | FETCH |  |
| 17 | UICC → ME | PROACTIVE COMMAND: SEND DATA (store mode) 4.2.2 | [200 Bytes] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DATA (store mode) 4.2.2 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA 4.2.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: SEND DATA (Immediate mode) 4.2.3 | [100 Bytes] |
| 22 | ME → NG-SS | Transfer of 500 Bytes of data to the NG-SS through channel 1 |  |
| 23 | ME → UICC | TERMINAL RESPONSE: SEND DATA (Immediate mode) 4.2.3 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 4.2.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 4.2.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 4.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | 00 | 01 | .. | C7 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 4.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 4.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 81 | D4 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 |
|  | B6 | 81 | C8 | C8 | C9 | .. | FF | 00 | 01 | .. | 8F |  |

TERMINAL RESPONSE: SEND DATA 4.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Store mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DATA 4.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 6F | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 64 | 90 | 91 | .. | F3 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SEND DATA 4.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Immediate mode

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

27.22.4.30.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.2.

#### 27.22.4.31 GET CHANNEL STATUS

##### 27.22.4.31.1 Definition and applicability

See clause 3.2.2.

##### 27.22.4.31.2 Conformance requirements

The ME shall support the class "e" commands. For sequences 1.4 to 1.5 the support of E-UTRAN, for sequence 1.6 the support of NG-RAN as defined in:

- TS 31.111 [15].

is required in addition.

##### 27.22.4.31.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the UICC after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the UICC is function of the ME and the network capabilities against asked parameters by the UICC.

##### 27.22.4.31.4 Method of test

27.22.4.31.4.1 Initial conditions

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If programmable USIM with test applet is used (as defined in clause 27.0), UICC shall register for Data Available and Channel Status Event using the proactive command SET UP EVENT LIST with Data Available and Channel Status event in the event list (ref to ETSI TS 102.241 cl 6.7.1.2).

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The channel identifier value used for these tests is set to 1 as an example.

This channel identifier is dependent on the ME's default channel identifier as declared in table A.2/27.

For sequences 1.1 to 1.3:

The ME is connected to the USIM Simulator and the USS. The following Bearer Parameters used are those defined in the default Test PDP context3, for test cases using packet services:

Bearer Parameters: Same Bearer Parameters as defined in clause 27.22.4.27.2.4.1

GPRS Parameters: Same GPRS Parameters as defined in clause 27.22.4.27.2.4.1

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.2.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.2.4.1.

For sequences 1.4 to 1.5

The ME is connected to the USIM Simulator and the E-USS/NB-SS. Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The default E-UTRAN/EPC UICC, the default E-UTRAN parameters and the following parameters are used:

Network access name: TestGp.rs

User login: UserLog

User password: UserPwd

UICC/ME interface transport level: Same UICC/ME transport interface level as defined in clause 27.22.4.27.6.4.1

Data destination address: Same Data Destination Address as defined in clause 27.22.4.27.6.4.1.

For sequence 1.6

The ME is connected to the USIM Simulator and the NG-SS. The default NG-RAN UICC, the default NG-RAN parameters, the URSP rules stored in the ME and the Allowed S-NSSAI list as defined in clause 27.22.4.27.8.4.1 is configured in NG-SS are used.

27.22.4.31.4.2 Procedure

Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.1.1 |  |
| 4 | ME → UICC | TERMINAL RESPONSE GET STATUS 1.1.1 A  Or  TERMINAL RESPONSE: GET STATUS 1.1.1B  Or  TERMINAL RESPONSE: GET STATUS 1.1.1C | [Command performed successfully] |

PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |

TERMINAL RESPONSE: GET STATUS 1.1.1A

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.1.1B

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: No Channel available, link not established or PDP context not activated

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 00 | 00 |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.1.1C

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1, Link not established or PDP context not activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

.

.

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | Note1 |  |  |  |  |  |  |  |  |  |  |  |

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 00 B8 02 02 00'.

Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 4 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 5 | USS → ME | PDP context activation accept |  |
| 6 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A or TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.2.1 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.2.1 |  |
| 10 | ME → UICC | TERMINAL RESPONSE GET STATUS 1.2.1 A  Or  TERMINAL RESPONSE: GET STATUS 1.2.1B | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: UICC

Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Network access name: TestGp.rs

Text String: UserLog (User login)

Text String: UserPwd (User password)

UICC/ME interface transport level

Transport format: UDP

Port number: 44444

Data destination address 01.01.01.01

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV | D0 | 42 | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 35 |
|  | 07 | 02 | 03 | 04 | 03 | 04 | 1F | 02 | 39 | 02 | 03 | E8 |
|  | 47 | 0A | 06 | 54 | 65 | 73 | 74 | 47 | 70 | 02 | 72 | 73 |
|  | 0D | 08 | F4 | 55 | 73 | 65 | 72 | 4C | 6F | 67 | 0D | 08 |
|  | F4 | 55 | 73 | 65 | 72 | 50 | 77 | 64 | 3C | 03 | 01 | AD |
|  | 9C | 3E | 05 | 21 | 01 | 01 | 01 | 01 |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 03 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 00

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | 38 | 02 | 81 | 00 | 35 | 07 | 02 | 00 | 04 | 03 | 04 | 1F |
|  | 02 | 39 | 02 | 03 | E8 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |

TERMINAL RESPONSE: GET STATUS 1.2.1A

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established or PDP context activated

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 81 | 00 |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.2.1B

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1 open, Link established or PDP context activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

.

.

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | Note1 |  |  |  |  |  |  |  |  |  |  |  |

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. The channel status TLV coding of the opened channel shall state "Link established or PDP context activated". Each other channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link is not established or PDP context not activated". As an example, if the mobile supports two channels and channel 1 is opened then the corresponding channel status data objects coding would be: 'B8 02 81 00 B8 02 02 00'.

Expected sequence 1.3 (GET STATUS, after a link dropped)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME → UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 5 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | See initial conditions |
| 6 | ME → UICC | FETCH |  |
| 7 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.1.1 |  |
| 8 | ME → USS | PDP context activation request | [The UE may request IPv4 or IPv4v6 address as PDP type.] |
| 9 | USS → ME | PDP context activation accept |  |
| 10 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A  or  TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B | [Command performed successfully] |
| 11 | USS → ME | DROP LINK |  |
| 12 | ME → UICC | ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1 | [Link dropped] |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: GET STATUS 1.3.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.3.1 |  |
| 16 | ME → UICC | TERMINAL RESPONSE: GET STATUS 1.3.1A  Or  TERMINAL RESPONSE: GET STATUS 1.3.1B  Or  TERMINAL RESPONSE: GET STATUS 1.3.1C  Or  TERMINAL RESPONSE: GET STATUS 1.3.1D  Or  TERMINAL RESPONSE: GET STATUS 1.3.1E | [Command performed successfully] |

TERMINAL RESPONSE: GET STATUS 1.3.1A

Same as TERMINAL RESPONSE: GET STATUS 1.1.1A

TERMINAL RESPONSE: GET STATUS 1.3.1B

Same as TERMINAL RESPONSE: GET STATUS 1.1.1B

TERMINAL RESPONSE: GET STATUS 1.3.1C

Same as TERMINAL RESPONSE: GET STATUS 1.1.1C

TERMINAL RESPONSE: GET STATUS 1.3.1D

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1, link dropped

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 01 | 05 |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.3.1E

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1, link dropped

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

.

.

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 01 | 05 | Note1 |  |  |  |  |  |  |  |

Note1: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding except that one for which the link was dropped by the SS shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 05 B8 02 02 00'.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: UICC

Destination device: ME

Event list

Event 1: Channel Status

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
|  | 99 | 01 | 0A |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1

Logically:

Event list

Event list: Channel Status

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1, link dropped

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0B | 99 | 01 | 0A | 82 | 02 | 82 | 81 | B8 | 02 | 01 |
|  | 05 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |

Expected sequence 1.4 (GET STATUS, EPS bearer with APN different from default APN)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1 | See initial conditions |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 |  |
| 4 | ME → USER | The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase | [IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier] |
| 5 | USER → ME | The user confirms | [IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user] |
| 6 | ME → E-USS/NB-SS | PDN CONNECTIVITY REQUEST | [The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"] |
| 7 | E-USS/NB-SS → ME | ACTIVATE EPS BEARER CONTEXT REQUEST | [The E-UTRAN parameters are used] |
| 8 | ME → E-USS/NB-SS | ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT |  |
| 9 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A  OR  TERMINAL RESPONSE:  OPEN CHANNEL 6.1.1B | [Command performed successfully  OR  Command performed with modifications] |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.1.1 |  |
| 13 | ME → UICC | TERMINAL RESPONSE GET STATUS 1.4.1 A  Or  TERMINAL RESPONSE: GET STATUS 1.4.1B | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: GET STATUS 1.1.1

Same as PROACTIVE COMMAND: GET STATUS from sequence 1.1

TERMINAL RESPONSE: GET STATUS 1.4.1A

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established or PDP context activated

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 81 | 00 |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.4.1B

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1 open, Link established or PDP context activated

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

:

:

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | Note |  |  |  |  |  |  |  |  |  |  |  |
|  | Note: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. The channel status TLV coding of the opened channel shall state "Link established or PDP context activated". Not more than one opened channel shall be indicated. Each other channel status TLV coding shall indicate the corresponding channel identifier and shall state "Link is not established or PDP context not activated". As an example, if the mobile supports two channels and channel 1 is opened then the corresponding channel status data objects coding would be: 'B8 02 81 00 B8 02 02 00'. | | | | | | | | | | | |

Expected sequence 1.5 (GET STATUS, EPS bearer with APN different from default APN, after a link dropped)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 |  |
| 4 | ME → UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 5 | UICC  ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 6.3.1 | See initial conditions |
| 6 | ME  UICC | FETCH |  |
| 7 | UICC  ME | PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 |  |
| 8 | ME → USER | The terminal shall display the alpha identifier "Open Channel for UICC?" during the confirmation phase | [IF NOT A.1/84 (No display) THEN the terminal shall ignore the alpha identifier] |
| 9 | USER → ME | The user confirms | [IF NOT A.1/85 (No keypad) THEN the terminal may open the channel without explicit confirmation by the user] |
| 10 | ME  E-USS/NB-SS | PDN CONNECTIVITY REQUEST | [The PDN CONNECTIVITY REQUEST shall contain the APN "Test12.rs"] |
| 11 | E-USS/NB-SS  ME | ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST | [The E-UTRAN parameters are used] |
| 12 | ME  E-USS/NB-SS | ACTIVATE DEFAULT EPS BEARER CONTEXT ACCEPT |  |
| 13 | ME  UICC | TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A  OR  TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B | [Command performed successfully  OR  Command performed with modifications] |
| 14 | E-USS/NB-SS  ME | DEACTIVATE EPS BEARER CONTEXT REQUEST | [Cause: #38 network failure] |
| 15 | ME  E-USS/NB-SS | DEACTIVATE EPS BEARER CONTEXT ACCEPT |  |
| 16 | ME → UICC | ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1 | [Link dropped] |
| 17 | UICC → ME | PROACTIVE COMMAND PENDING: GET STATUS 1.3.1 |  |
| 18 | ME → UICC | FETCH |  |
| 19 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.3.1 |  |
| 20 | ME → UICC | TERMINAL RESPONSE: GET STATUS 1.3.1A  Or  TERMINAL RESPONSE: GET STATUS 1.3.1B  Or  TERMINAL RESPONSE: GET STATUS 1.3.1C  Or  TERMINAL RESPONSE: GET STATUS 1.3.1D  Or  TERMINAL RESPONSE: GET STATUS 1.3.1E | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 6.3.1

Same as PROACTIVE COMMAND: OPEN CHANNEL 6.3.1 in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1A in clause 27.22.4.27.6.4.

TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B

Same as TERMINAL RESPONSE: OPEN CHANNEL 6.1.1B in clause 27.22.4.27.6.4.

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: UICC

Destination device: ME

Event list

Event 1: Channel Status

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
|  | 99 | 01 | 0A |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1

Logically:

Event list

Event list: Channel Status

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1, link dropped

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0B | 99 | 01 | 0A | 82 | 02 | 82 | 81 | B8 | 02 | 01 |
|  | 05 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |

TERMINAL RESPONSE: GET STATUS 1.3.1A

Same as TERMINAL RESPONSE: GET STATUS 1.1.1A

TERMINAL RESPONSE: GET STATUS 1.3.1B

Same as TERMINAL RESPONSE: GET STATUS 1.1.1B

TERMINAL RESPONSE: GET STATUS 1.3.1C

Same as TERMINAL RESPONSE: GET STATUS 1.1.1C

TERMINAL RESPONSE: GET STATUS 1.3.1D

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1, link dropped

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 01 | 05 |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: GET STATUS 1.3.1E

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel status

Channel 1 status: Channel identifier 1, link dropped

Channel 2 status: Channel identifier 2, Link not established or PDP context not activated

:

:

Channel n status: Channel identifier n, Link not established or PDP context not activated

The number of channel status data objects shall be same as the number of channels(n) supported by the ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B8 | 02 | 01 | 05 | Note |  |  |  |  |  |  |  |
|  | Note: The Terminal Response shall contain as many channel status TLVs as channels are supported by the ME. Each channel status TLV coding except that one for which the link was dropped by the SS shall indicate the corresponding channel identifier and shall state "Link not established or PDP context not activated". As an example, if the mobile supports two channels then the corresponding channel status data objects coding would be: 'B8 02 01 05 B8 02 02 00'. | | | | | | | | | | | |

Expected sequence 1.6 (GET STATUS, after a link dropped during receiving data)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | USER → ME | Set and configure URSP rules with DNN "TestGp.rs" in the terminal configuration if required.  Internet PDU session using DNN "internet" is configured in the terminal. | [see initial conditions] |
| 2 | ME → NG-SS | The ME successfully registers the NG-RAN cell. |  |
| 3 | ME → NG-SS | An Internet PDU Session is established successfully. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.6.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.6.1 |  |
| 7 | ME → UICC | TERMINAL RESPONSE: SET UP EVENT LIST 1.6.1 | [Command performed successfully]  If programmable USIM with test applet is used (as defined in clause 27.0), the TERMINAL RESPONSE cannot be verified and that the Event has been registered in the device is implicitly verified at step 21 (ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1)  and step 39 (ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1). |
| 8 | UICC → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.6.1 |  |
| 9 | ME → UICC | FETCH |  |
| 10 | UICC → ME | PROACTIVE COMMAND: OPEN CHANNEL 1.6.1 |  |
| 11 | ME → USER | The ME may display channel opening information. |  |
| 12 | ME → NG-SS | PDU SESSION ESTABLISHMENT REQUEST within UL NAS TRANSPORT is sent to the network. | DNN=TestGp.rs, S-NSSAI='01 01 01 02', SSC mode=1. |
| 13 | NG-SS → ME | PDU SESSION ESTABLISHMENT ACCEPT |  |
| 14 | ME → UICC | TERMINAL RESPONSE: OPEN CHANNEL 1.6.1 | [Command performed successfully] |
| 15 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DATA (immediate) 1.6.1 |  |
| 16 | ME → UICC | FETCH |  |
| 17 | UICC → ME | PROACTIVE COMMAND: SEND DATA (immediate) 1.6.1 |  |
| 18 | ME → NG-SS | Transfer of 8 Bytes of data to the NG-SS through channel 1 | [To retrieve ME's port number] |
| 19 | ME → UICC | TERMINAL RESPONSE: SEND DATA (immediate) 1.6.1 | [Command performed successfully] |
| 20 | NG-SS → ME | Transfer of 1000 Bytes of data to the ME through channel 1 using the ME's port number, which was retrieved in step 18 |  |
| 21 | ME → UICC | ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1 | (1000 Bytes of data in the ME buffer) |
| 22 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.1 |  |
| 23 | ME → UICC | FETCH |  |
| 24 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.6.1 | 200 Bytes |
| 25 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.6.1 |  |
| 26 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.2 |  |
| 27 | ME → UICC | FETCH |  |
| 28 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.6.2 | 200 Bytes |
| 29 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.6.2 |  |
| 30 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.3 |  |
| 31 | ME → UICC | FETCH |  |
| 32 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.6.3 | 200 Bytes |
| 33 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.6.3 |  |
| 34 | UICC → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.6.4 |  |
| 35 | ME → UICC | FETCH |  |
| 36 | UICC → ME | PROACTIVE COMMAND: RECEIVE DATA 1.6.4 | 200 Bytes |
| 37 | ME → UICC | TERMINAL RESPONSE: RECEIVE DATA 1.6.4 |  |
| 38 | NG-SS → ME | DROP LINK | (Close the TCP connection or release PDU session or release the RRC) |
| 39 | ME → UICC | ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1 | [Link dropped] |
| 40 | UICC → ME | PROACTIVE COMMAND PENDING: GET STATUS 1.6.1 |  |
| 41 | ME → UICC | FETCH |  |
| 42 | UICC → ME | PROACTIVE COMMAND: GET STATUS 1.6.1 |  |
| 43 | ME → UICC | TERMINAL RESPONSE: GET STATUS 1.6.1A  Or  TERMINAL RESPONSE: GET STATUS 1.6.1B  Or  TERMINAL RESPONSE: GET STATUS 1.6.1C  Or  TERMINAL RESPONSE: GET STATUS 1.6.1D  Or  TERMINAL RESPONSE: GET STATUS 1.6.1E | [Command performed successfully] |

PROACTIVE COMMAND: SET UP EVENT LIST 1.6.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: UICC

Destination device: ME

Event list

Event 1: Data available

Event 2: Channel Status

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
|  | 99 | 02 | 09 | 0A |  |  |  |  |  |  |  |

TERMINAL RESPONSE: SET UP EVENT LIST 1.6.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

PROACTIVE COMMAND: OPEN CHANNEL 1.6.1

Same as 27.22.4.27.8.4.2 PROACTIVE COMMAND: OPEN CHANNEL 8.2.1 in expected sequence 8.2

TERMINAL RESPONSE: OPEN CHANNEL 1.6.1

Same as 27.22.4.27.8.4.2 TERMINAL RESPONSE: OPEN CHANNEL 8.2.1 in expected sequence 8.2

PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
|  | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 |  |  |  |

TERMINAL RESPONSE: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B7 | 01 | FF |  |  |  |  |  |  |  |  |  |

ENVELOPE: EVENT DOWNLOAD - Data available 1.6.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME

Destination device: UICC

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
|  | 00 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.6.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 02 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.6.3

Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 03 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: RECEIVE DATA 1.6.4

Logically:

Command details

Command number: 4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: UICC

Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0C | 81 | 03 | 04 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
|  | 01 | C8 |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 00 | 01 | 02 | .. | C7 | B7 | 01 | FF |  |

TERMINAL RESPONSE: RECEIVE DATA 1.6.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 02 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | C8 | C9 | CA | .. | FF | 00 | 01 | 02 | .. |
|  | 8F | B7 | 01 | FF |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 1.6.3

Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 90 91 .. FF 00 01 – 57 (200 Bytes of data)

Channel data length: FF

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 03 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 90 | 91 | 92 | .. | FF | 00 | 01 | 02 | .. |
|  | 57 | B7 | 01 | FF |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RECEIVE DATA 1.6.4

Logically:

Command details

Command number: 4

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 04 | 42 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | B6 | 81 | C8 | 58 | 59 | 5A | .. | FF | 00 | 01 | 02 | .. |
|  | 1F | B7 | 01 | C8 |  |  |  |  |  |  |  |  |

ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.6.1

Same as ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1 in expected sequence 1.3

PROACTIVE COMMAND: GET STATUS 1.6.1

Same as PROACTIVE COMMAND: GET STATUS 1.3.1 in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1A

Same as TERMINAL RESPONSE: GET STATUS 1.3.1A in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1B

Same as TERMINAL RESPONSE: GET STATUS 1.3.1B in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1C in expected sequence 1.3

Same as TERMINAL RESPONSE: GET STATUS 1.3.1C in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1D

Same as TERMINAL RESPONSE: GET STATUS 1.6.1D in expected sequence 1.3

TERMINAL RESPONSE: GET STATUS 1.6.1E

Same as TERMINAL RESPONSE: GET STATUS 1.6.1E in expected sequence 1.3

##### 27.22.4.31.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.