#### 27.22.4.23 RUN AT COMMAND

##### 27.22.4.23.1 RUN AT COMMAND (normal)

27.22.4.23.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31 and clause 8.41.

- TS 27.007 [18].

27.22.4.23.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.1.4 Method of test

27.22.4.23.1.4.1 Initial conditions

The ME is connected to the USIM Simulator. 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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.1.4.2 Procedure

Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.1.1 | [no alpha identifier, request IMSI] |
| 4 | ME (→ User) | The ME may give information to the user concerning what is happening |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 1.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
|  | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.2.1 | [null data alpha identifier, request IMSI] |
| 4 | ME | The ME should not give any information to user on the fact that the ME is performing an AT command |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 1.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier null data object

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 00 | A8 | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D |  |

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.3.1 | [alpha identifier, request IMSI] |
| 4 | ME → USER | Display "Run AT Command" |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 1.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 0E | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | A8 | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 |
|  | 0D |  |  |  |  |  |  |  |  |  |  |  |

27.22.4.23.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

##### 27.22.4.23.2 RUN AT COMMAND (Icon support)

27.22.4.23.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31 and clause 8.41.

- TS 27.007 [18].

27.22.4.23.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

In addition to verify that if an icon is provided by the UICC, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.23.2.4 Method of test

27.22.4.23.2.4.1 Initial conditions

The ME is connected to the USIM Simulator. 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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

The ME screen shall be in its normal stand-by display.

27.22.4.23.2.4.2 Procedure

Expected Sequence 2.1A (RUN AT COMMAND, basic icon self explanatory, request IMSI, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.1.1 | [BASIC-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display BASIC ICON without the alpha identifier |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A | [Command performed successfully, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI<CR>"

Icon identifier:

Icon qualifier: icon is self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | A8 |
|  | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D | 9E | 02 | 00 |
|  | 01 |  |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

Expected Sequence 2.1B (RUN AT COMMAND, basic icon self explanatory, request IMSI, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.1.1 | [BASIC-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Basic Icon" without the BASIC-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed but requested icon could not be displayed, AT response containing IMSI] |

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully, but requested icon could not be displayed

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

Expected Sequence 2.2A (RUN AT COMMAND, colour icon self explanatory, request IMSI, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.2.1 | [COLOUR-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display COLOUR-ICON without the alpha identifier |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A | [Command performed successfully, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI<CR>"

Icon identifier:

Icon qualifier: icon is self-explanatory

Icon identifier: record 2 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
|  | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
|  | A8 | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D | 9E | 02 |
|  | 00 | 02 |  |  |  |  |  |  |  |  |  |  |

Expected Sequence 2.2B (RUN AT COMMAND, colour icon self explanatory, request IMSI, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.2.1 | [COLOUR-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Colour Icon" without the COLOUR-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed but requested icon could not be displayed, AT response containing IMSI] |

Expected Sequence 2.3A (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.3.1 | [BASIC-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Basic Icon" and BASIC-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A | [Command performed successfully, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI<CR>"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | A8 |
|  | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D | 9E | 02 | 01 |
|  | 01 |  |  |  |  |  |  |  |  |  |  |  |

Expected Sequence 2.3B (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.3.1 | [BASIC-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Basic Icon" without BASIC-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed but requested icon could not be displayed, AT response containing IMSI] |

Expected Sequence 2.4A (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.4.1 | [COLOUR-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Colour Icon" and COLOUR-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A | [Command performed successfully, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI<CR>"

Icon identifier:

Icon qualifier: icon is self-explanatory

Icon identifier: record 2 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
|  | A8 | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D | 9E | 02 |
|  | 01 | 02 |  |  |  |  |  |  |  |  |  |  |

Expected Sequence 2.4B (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.4.1 | [COLOUR-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display "Colour Icon" without COLOUR-ICON |  |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed but requested icon could not be displayed, AT response containing IMSI] |

Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.5.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.5.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 2.5.1 | [Command data not understood by ME] |

PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

AT Command

AT Command string: "AT+CIMI<CR>"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
|  | 08 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | 0D | 9E | 02 | 01 |
|  | 01 |  |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Result

General Result: Command data not understood by ME

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |

27.22.4.23.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.5.

##### 27.22.4.23.3 RUN AT COMMAND (support of Text Attribute)

27.22.4.23.3.1 RUN AT COMMAND (support of Text Attribute – Left Alignment)

27.22.4.23.3.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.1.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with left alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.1.4 Method of test

27.22.4.23.3.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.1.4.2 Procedure

Expected Sequence 3.1(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Left Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.1.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with left alignment, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.1.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.1.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.1.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [Message shall be formatted without left alignment, request IMSI. Remark: If left alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.1.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 07 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.1.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

27.22.4.23.3.2 RUN AT COMMAND (support of Text Attribute – Center Alignment)

27.22.4.23.3.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.2.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with center alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.2.4 Method of test

27.22.4.23.3.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.2.4.2 Procedure

Expected Sequence 3.2(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Center Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.2.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with center alignment, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.2.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.2.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.2.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [Message shall be formatted without center alignment, request IMSI. Remark: If center alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.2.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2A | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 07 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D04 | 04 | 00 | 10 | 01 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.2.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.2.

27.22.4.23.3.3 RUN AT COMMAND (support of Text Attribute – Right Alignment)

27.22.4.23.3.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.3.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.3.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with right alignment text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.3.4 Method of test

27.22.4.23.3.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.3.4.2 Procedure

Expected Sequence 3.3(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Right Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.3.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with right alignment, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.3.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.3.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.3.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [Message shall be formatted without right alignment, request IMSI. Remark: If right alignment is the ME's default alignment as declared in table A.2/16, no alignment change will take place] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.3.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 07 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 02 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.3.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.3.

27.22.4.23.3.4 RUN AT COMMAND (support of Text Attribute – Large Font Size)

27.22.4.23.3.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.4.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.4.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with large font size as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.4.4 Method of test

27.22.4.23.3.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.4.4.2 Procedure

Expected Sequence 3.4(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Large Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.4.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with large font size, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.4.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.4.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with normal font size, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.4.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.4.1 |  |
| 16 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with large font size, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.4.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.4.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.4.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with normal font size, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.4.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.4.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 04 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.4.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.4.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.4.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.4.

27.22.4.23.3.5 RUN AT COMMAND (support of Text Attribute – Small Font Size)

27.22.4.23.3.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.5.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.5.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with small font size as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.5.4 Method of test

27.22.4.23.3.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.5.4.2 Procedure

Expected Sequence 3.5(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Small Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.5.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with small font size, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.5.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.5.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with normal font size, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.5.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.5.1 |  |
| 16 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with small font size, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.5.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.5.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.5.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with normal font size, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.5.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 08 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.5.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.5.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.5.

27.22.4.23.3.6 RUN AT COMMAND (support of Text Attribute – Bold On)

27.22.4.23.3.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.6.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.6.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with bold text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.6.4 Method of test

27.22.4.23.3.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.6.4.2 Procedure

Expected Sequence 3.6(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Bold On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.6.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with bold on, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.6.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.6.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with bold off, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.6.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.6.1 |  |
| 16 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with bold on, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.6.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.6.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.6.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with bold off, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.6.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.6.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 10 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.6.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.6.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.6.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.6.

27.22.4.23.3.7 RUN AT COMMAND (support of Text Attribute – Italic On)

27.22.4.23.3.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.7.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.7.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with italic text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.7.4 Method of test

27.22.4.23.3.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.7.4.2 Procedure

Expected Sequence 3.7(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Italic On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.7.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with italic on, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.7.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.7.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with italic off, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.7.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.7.1 |  |
| 16 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with italic on, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.7.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.7.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.7.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with italic off, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.7.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.7.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 20 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.7.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.7.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 |
|  |  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D |
|  |  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 |
|  |  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.7.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.7.

27.22.4.23.3.8 RUN AT COMMAND (support of Text Attribute – Underline On)

27.22.4.23.3.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.8.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.8.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with underline text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.8.4 Method of test

27.22.4.23.3.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.8.4.2 Procedure

Expected Sequence 3.8(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Underline On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.8.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with underline on, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.8.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.8.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with underline off, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.8.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.8.1 |  |
| 16 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with underline on, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.8.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.8.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.8.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with underline off, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.8.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.8.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 40 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.8.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.8.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.8.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.8.

27.22.4.23.3.9 RUN AT COMMAND (support of Text Attribute – Strikethrough On)

27.22.4.23.3.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.9.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.9.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with strikethrough text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.9.4 Method of test

27.22.4.23.3.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.9.4.2 Procedure

Expected Sequence 3.9(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Strikethrough On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.9.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with strikethrough on, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.9.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.9.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with strikethrough off, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.9.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.1 |  |
| 14 | ME → UICC | FETCH |  |
| 15 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.9.1 |  |
| 16 | ME (→ USER) | Display " Run AT Command 1" | [alpha identifier is displayed with strikethrough on, request IMSI] |
| 17 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.9.1 | [Command performed successfully, AT Response containing IMSI] |
| 18 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.9.3 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.9.3 |  |
| 22 | ME (→ USER) | Display "Run AT Command 3" | [alpha identifier is displayed with strikethrough off, request IMSI] |
| 23 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.9.1 | [Command performed successfully, AT Response containing IMSI] |
| 24 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.9.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 80 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.9.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.9.3

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 3"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 33 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.9.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.9.

27.22.4.23.3.10 RUN AT COMMAND (support of Text Attribute – Foreground and Background Colour)

27.22.4.23.3.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.3.10.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.3.10.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with foreground and background colour text attribute as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.3.10.4 Method of test

27.22.4.23.3.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.3.10.4.2 Procedure

Expected Sequence 3.10(RUN AT COMMAND, with alpha identifier presented, request IMSI, Text Attribute – Foreground and Background Colour)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.10.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.10.1 |  |
| 4 | ME (→ USER) | Display "Run AT Command 1" | [alpha identifier is displayed with foreground and background colour according to the text attribute configuration, request IMSI] |
| 5 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.10.1 | [Command performed successfully, AT Response containing IMSI] |
| 6 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 3.10.2 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: RUN AT COMMAND 3.10.2 |  |
| 10 | ME (→ USER) | Display "Run AT Command 2" | [alpha identifier is displayed with ME's default foreground and background colour, request IMSI] |
| 11 | ME → UICC | TERMINAL RESPONSE: RUN AT COMMAND 3.10.1 | [Command performed successfully, AT Response containing IMSI] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.10.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 1"

AT Command

AT Command string: "AT+CIMI<CR>"

Text Attribute

Formatting position: 0

Formatting length: 16

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 | 2B | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 31 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D | D0 | 04 | 00 | 10 | 00 | B4 |  |  |  |

PROACTIVE COMMAND: RUN AT COMMAND 3.10.2

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command 2"

AT Command

AT Command string: "AT+CIMI<CR>"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 25 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
|  | 10 | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
|  | 61 | 6E | 64 | 20 | 32 | A8 | 08 | 41 | 54 | 2B | 43 | 49 |
|  | 4D | 49 | 0D |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: RUN AT COMMAND 3.10.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

AT Response

AT Response string: <CR><LF>IMSI<CR><LF><CR><LF>OK<CR><LF>

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|  | A9 | 19 | 0D | 0A | 30 | 30 | 31 | 30 | 31 | 30 | 31 | 32 |
|  | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 0D | 0A | 0D | 0A | 4F |
|  | 4B | 0D | 0A |  |  |  |  |  |  |  |  |  |

27.22.4.23.3.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.10.

##### 27.22.4.23.4 RUN AT COMMAND (UCS2 display in Cyrillic)

27.22.4.23.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.4.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.4.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.4.4 Method of test

27.22.4.23.4.4.1 Initial conditions

The ME is connected to the UICC Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.4.4.2 Procedure

Expected Sequence 4.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Cyrillic, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.4.4.2, Expected Sequence 4.1.

27.22.4.23.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

##### 27.22.4.23.5 RUN AT COMMAND (UCS2 display in Chinese)

27.22.4.23.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.5.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.5.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.5.4 Method of test

27.22.4.23.5.4.1 Initial conditions

The ME is connected to the UICC Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.5.4.2 Procedure

Expected Sequence 5.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Chinese, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.5.4.2, Expected Sequence 5.1.

27.22.4.23.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

##### 27.22.4.23.6 RUN AT COMMAND (UCS2 display in Katakana)

27.22.4.23.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.23.6.2 Conformance requirement

The ME shall support the Proactive UICC: RUN AT COMMAND facility as defined in:

- TS 31.111 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 8.6, clause 8.7, clause 8.2, clause 8.40, clause 8.31, clause 8.41 and clause 8.70.

- TS 27.007 [18].

The terminal shall support the text attribute.

27.22.4.23.6.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND with UCS2 alpha identifier as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the UICC.

27.22.4.23.6.4 Method of test

27.22.4.23.6.4.1 Initial conditions

The ME is connected to the UICC Simulator.

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.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.6.4.2 Procedure

Expected Sequence 6.1(RUN AT COMMAND, alpha identifier presented coded with UCS2 in Katakana, request ME Manufacturer ID)

See ETSI TS 102 384 [26] in clause 27.22.4.23.6.4.2, Expected Sequence 6.1.

27.22.4.23.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

#### 27.22.4.24 SEND DTMF

##### 27.22.4.24.1 SEND DTMF (Normal)

27.22.4.24.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

27.22.4.24.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that if an alpha identifier is provided by the UICC and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

27.22.4.24.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.1.4. 2 Procedure

Expected Sequence 1.1 (SEND DTMF, normal)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 1.1.1 |  |
| 7 | ME → USER | May give information to the user concerning what is happening. Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

DTMF String: "1" pause "2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | AC |
|  | 02 | C1 | F2 |  |  |  |  |  |  |  |  |  |

Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE: SEND DTMF 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 1.2 (SEND DTMF, containing alpha identifier)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 1.2.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | Alpha identifier |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 09 | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | AC | 05 |
|  | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |  |  |

Start DTMF 1.3

Logically:

DTMF String: "3"

Start DTMF 1.4

Logically:

DTMF String: "4"

Start DTMF 1.5

Logically:

DTMF String: "5"

Start DTMF 1.6

Logically:

DTMF String: "6"

Start DTMF 1.7

Logically:

DTMF String: "7"

Start DTMF 1.8

Logically:

DTMF String: "8"

Start DTMF 1.9

Logically:

DTMF String: "9"

Start DTMF 1.10

Logically:

DTMF String: "0"

Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.3.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 1.3.1 | Alpha identifier with null data object |
| 7 | ME → USER | Do not give any information to the user on the fact that the ME is performing a SEND DTMF command. Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 30 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 1.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "" (null data object)

DTMF String: "1" pause pause pause pause pause pause pause pause pause pause "2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 00 | AC | 06 | C1 | CC | CC | CC | CC | 2C |  |  |  |

Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 | [Mobile is not in a speech call] |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 1.1.1 |  |
| 4 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 1.4.1 | [ME currently unable to process command, not in speech call] |
| 5 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

TERMINAL RESPONSE: SEND DTMF 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: ME currently unable to process command

Additional information: Not in speech call

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 20 |
|  | 07 |  |  |  |  |  |  |  |  |  |  |  |

27.22.4.24.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

##### 27.22.4.24.2 SEND DTMF (Display of icons)

27.22.4.24.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.2.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44, clause 8.31 and clause 6.5.4.

27.22.4.24.2.3 Test purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.2.4 Method of test

27.22.4.24.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and only connected to the System Simulator if the System Simulator is mentioned in the sequence table.Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

The elementary files are coded as Toolkit default.

27.22.4.24.2.4.2 Procedure

Expected Sequence 2.1A (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.1.1 | [BASIC-ICON, self-explanatory] |
| 7 | ME → USER | Display the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Basic Icon"

DTMF String: "1" pause "2"

Icon identifier

Icon qualifier: icon is self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | AC |
|  | 02 | C1 | F2 | 9E | 02 | 00 | 01 |  |  |  |  |  |

DTMF Request 2.1.1

Logically:

DTMF String: $DTMF\_2.1$ = "C1 F2" (given as example)

TERMINAL RESPONSE: SEND DTMF 2.1.1A

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.1.1 | [BASIC-ICON, self-explanatory] |
| 7 | ME → USER | Display "Basic Icon" without the icon Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20 % |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

TERMINAL RESPONSE: SEND DTMF 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |

Expected Sequence 2.2A (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
| --- | --- | --- | --- |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.2.1 | [COLOUR-ICON] |
| 7 | ME → USER | Display the COLOUR-ICON Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Colour Icon"

DTMF String: "1" pause "2"

Icon identifier:

Icon qualifier: icon is self-explanatory

Icon identifier: record 2 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
|  | AC | 02 | C1 | F2 | 9E | 02 | 00 | 02 |  |  |  |  |

Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.2.1 | [COLOUR-ICON] |
| 7 | ME → USER | Display "Colour Icon" without the icon Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.3.1 | [Alpha identifier & BASIC-ICON, not self-explanatory] |
| 7 | ME → USER | Display "Send DTMF" and the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20 % |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1A | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF"

DTMF String: "1" pause "2"

Icon identifier:

Icon qualifier: icon is not self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 09 | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | AC | 02 |
|  | C1 | F2 | 9E | 02 | 01 | 01 |  |  |  |  |  |  |

Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 2.3.1 | [Alpha identifier & BASIC-ICON, not self-explanatory] |
| 7 | ME → USER | Display "Send DTMF" without the icon Do not locally generate audible DTMF tones and play them to the user. |  |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

27.22.4.24.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

##### 27.22.4.24.3 SEND DTMF (UCS2 display in Cyrillic)

27.22.4.24.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.3.4 Method of test

27.22.4.24.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table.The elementary files are coded as USIM Application Toolkit default.

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

27.22.4.24.3.4.2 Procedure

Expected Sequence 3.1 (SEND DTMF, successful, UCS2 text in Cyrillic)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 3.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 3.1.1 |  |
| 7 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 3.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha Identifier

Text: "ЗДРАВСТВУЙТЕ"

DTMF String: "1" pause "2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 19 | 80 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
|  | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
|  | 04 | 15 | AC | 02 | C1 | F2 |  |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successful

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

##### 27.22.4.24.4 SEND DTMF (support of Text Attribute)

27.22.4.24.4.1 SEND DTMF (support of Text Attribute – Left Alignment)

27.22.4.24.4.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.1.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the left alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.1.4 Method of test

27.22.4.24.4.1.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.1.4.2 Procedure

Expected Sequence 4.1 (SEND DTMF, with text attribute – Left Alignment)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.1.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with left alignment] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.1.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.1.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.1.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.1.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.1.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

27.22.4.24.4.2 SEND DTMF (support of Text Attribute – Center Alignment)

27.22.4.24.4.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.2.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.2.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the center alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.2.4 Method of test

27.22.4.24.4.2.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.2.4.2 Procedure

Expected Sequence 4.2 (SEND DTMF, with text attribute – Center Alignment)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.2.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with center alignment] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.2.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.2.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.2.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.2.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

Text Attribute

Formatting position: 0

Formatting length: 11

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 01 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.2.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.2.

27.22.4.24.4.3 SEND DTMF (support of Text Attribute – Right Alignment)

27.22.4.24.4.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.3.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.3.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the right alignment text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.3.4 Method of test

27.22.4.24.4.3.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.3.4.2 Procedure

Expected Sequence 4.3 (SEND DTMF, with text attribute – Right Alignment)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.3.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.3.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with right alignment] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.3.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.3.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.3.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/17, no alignment change will take place] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.3.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.3.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

Text Attribute

Formatting position: 0

Formatting length: 11

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | B0 | 02 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.3.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.3.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.3.

27.22.4.24.4.4 SEND DTMF (support of Text Attribute – Large Font Size)

27.22.4.24.4.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.4.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.4.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the large font size text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.4.4 Method of test

27.22.4.24.4.4.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.4.4.2 Procedure

Expected Sequence 4.4 (SEND DTMF, with text attribute – Large Font Size)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.4.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.4.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with large font size] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.4.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.4.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.4.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with normal font size] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.4.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.4.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.4.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with large font size] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.4.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.4.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.4.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with normal font size] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.4.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

Text Attribute

Formatting position: 0

Formatting length: 11

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 04 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.4.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.4.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.4.

27.22.4.24.4.5 SEND DTMF (support of Text Attribute – Small Font Size)

27.22.4.24.4.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.5.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the small font size text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.5.4 Method of test

27.22.4.24.4.5.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.5.4.2 Procedure

Expected Sequence 4.5 (SEND DTMF, with text attribute – Small Font Size)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.5.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.5.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with small font size] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.5.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.5.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.5.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with normal font size] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.5.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.5.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.5.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with small font size] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.5.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.5.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.5.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with normal font size] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.5.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.5.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

Text Attribute

Formatting position: 0

Formatting length: 11

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 08 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.5.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.5.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.5.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.5.

27.22.4.24.4.6 SEND DTMF (support of Text Attribute – Bold On)

27.22.4.24.4.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.6.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the bold text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.6.4 Method of test

27.22.4.24.4.6.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.6.4.2 Procedure

Expected Sequence 4.6 (SEND DTMF, with text attribute – Bold On)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.6.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.6.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with bold on] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.6.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.6.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.6.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with bold off] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.6.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.6.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.6.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with bold on] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.6.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.6.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.6.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with bold off] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.6.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.6.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 10 |
|  | B4 | 00 |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.6.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.6.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.6.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.6.

27.22.4.24.4.7 SEND DTMF (support of Text Attribute – Italic On)

27.22.4.24.4.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.7.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.7.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the italic text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.7.4 Method of test

27.22.4.24.4.7.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.7.4.2 Procedure

Expected Sequence 4.7 (SEND DTMF, with text attribute – Italic On)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.7.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.7.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with italic on] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.7.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.7.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.7.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with italic off] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.7.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.7.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.7.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with italic on] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.7.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.7.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.7.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with italic off] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.7.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.7.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 20 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.7.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.7.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.7.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.7.

27.22.4.24.4.8 SEND DTMF (support of Text Attribute – Underline On)

27.22.4.24.4.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.8.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.8.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the underline text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.8.4 Method of test

27.22.4.24.4.8.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.8.4.2 Procedure

Expected Sequence 4.8 (SEND DTMF, with text attribute – Underline On)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.8.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.8.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with underline on] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.8.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.8.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.8.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with underline off] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.8.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.8.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.8.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with underline on] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.8.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.8.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.8.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with underline off] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.8.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.8.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 40 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.8.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.8.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.8.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.8.

27.22.4.24.4.9 SEND DTMF (support of Text Attribute – Strikethrough On)

27.22.4.24.4.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.9.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.9.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the strikethrough text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.9.4 Method of test

27.22.4.24.4.9.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.9.4.2 Procedure

Expected Sequence 4.9 (SEND DTMF, with text attribute – Strikethrough On)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.9.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.9.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with strikethrough on] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.9.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.9.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.9.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with strikethrough off] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.9.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |
| 41 | User → ME | Set up a call to "+0123456789" |  |
| 42 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 43 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 44 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.9.1 |  |
| 45 | ME → UICC | FETCH |  |
| 46 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.9.1 |  |
| 47 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with strikethrough on] |
| 48 | ME → USS | Start DTMF 1.1 | ["1"] |
| 49 | ME → USS | Start DTMF 1.2 | ["2"] |
| 50 | ME → USS | Start DTMF 1.3 | ["3"] |
| 51 | ME → USS | Start DTMF 1.4 | ["4"] |
| 52 | ME → USS | Start DTMF 1.5 | ["5"] |
| 53 | ME → USS | Start DTMF 1.6 | ["6"] |
| 54 | ME → USS | Start DTMF 1.7 | ["7"] |
| 55 | ME → USS | Start DTMF 1.8 | ["8"] |
| 56 | ME → USS | Start DTMF 1.9 | ["9"] |
| 57 | ME → USS | Start DTMF 1.10 | ["0"] |
| 58 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.9.1 | [Command performed successfully] |
| 59 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 60 | User → ME | End the call |  |
| 61 | User → ME | Set up a call to "+0123456789" |  |
| 62 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 63 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 64 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.9.3 |  |
| 65 | ME → UICC | FETCH |  |
| 66 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.9.3 |  |
| 67 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with strikethrough off] |
| 68 | ME → USS | Start DTMF 1.1 | ["1"] |
| 69 | ME → USS | Start DTMF 1.2 | ["2"] |
| 70 | ME → USS | Start DTMF 1.3 | ["3"] |
| 71 | ME → USS | Start DTMF 1.4 | ["4"] |
| 72 | ME → USS | Start DTMF 1.5 | ["5"] |
| 73 | ME → USS | Start DTMF 1.6 | ["6"] |
| 74 | ME → USS | Start DTMF 1.7 | ["7"] |
| 75 | ME → USS | Start DTMF 1.8 | ["8"] |
| 76 | ME → USS | Start DTMF 1.9 | ["9"] |
| 77 | ME → USS | Start DTMF 1.10 | ["0"] |
| 78 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.9.1 | [Command performed successfully] |
| 79 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 80 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.9.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 80B |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.9.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.9.3

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 3"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 33 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.9.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.9.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.9.

27.22.4.24.4.10 SEND DTMF (support of Text Attribute – Foreground and Background Colour)

27.22.4.24.4.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.4.10.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2, clause 8.44 and clause 8.70.

27.22.4.24.4.10.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive UICC command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the UICC.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the UICC using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive UICC command.

To verify that the ME displays the alpha identifier according to the foreground and background colour text attribute configuration which are referred to in the contents of the SEND DTMF proactive UICC command.

27.22.4.24.4.10.4 Method of test

27.22.4.24.4.10.4.1 Initial conditions

The ME is connected to the USIM Simulator.

The elementary files are coded as USIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the USS.

27.22.4.24.4.10.4.2 Procedure

Expected Sequence 4.10 (SEND DTMF, with text attribute – Foreground and Background Colour)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.10.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.10.1 |  |
| 7 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with foreground and background colour according to the text attribute configuration] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME → USS | Start DTMF 1.2 | ["2"] |
| 10 | ME → USS | Start DTMF 1.3 | ["3"] |
| 11 | ME → USS | Start DTMF 1.4 | ["4"] |
| 12 | ME → USS | Start DTMF 1.5 | ["5"] |
| 13 | ME → USS | Start DTMF 1.6 | ["6"] |
| 14 | ME → USS | Start DTMF 1.7 | ["7"] |
| 15 | ME → USS | Start DTMF 1.8 | ["8"] |
| 16 | ME → USS | Start DTMF 1.9 | ["9"] |
| 17 | ME → USS | Start DTMF 1.10 | ["0"] |
| 18 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.10.1 | [Command performed successfully] |
| 19 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 20 | User → ME | End the call |  |
| 21 | User → ME | Set up a call to "+0123456789" |  |
| 22 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 23 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 24 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 4.10.2 |  |
| 25 | ME → UICC | FETCH |  |
| 26 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 4.10.2 |  |
| 27 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | [Alpha identifier is displayed with ME's default foreground and background colour] |
| 28 | ME → USS | Start DTMF 1.1 | ["1"] |
| 29 | ME → USS | Start DTMF 1.2 | ["2"] |
| 30 | ME → USS | Start DTMF 1.3 | ["3"] |
| 31 | ME → USS | Start DTMF 1.4 | ["4"] |
| 32 | ME → USS | Start DTMF 1.5 | ["5"] |
| 33 | ME → USS | Start DTMF 1.6 | ["6"] |
| 34 | ME → USS | Start DTMF 1.7 | ["7"] |
| 35 | ME → USS | Start DTMF 1.8 | ["8"] |
| 36 | ME → USS | Start DTMF 1.9 | ["9"] |
| 37 | ME → USS | Start DTMF 1.10 | ["0"] |
| 38 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 4.10.1 | [Command performed successfully] |
| 39 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 40 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 4.10.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 1"

DTMF String: "1234567890"

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 | 23 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 31 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 | D0 | 04 | 00 | 0B | 00 |
|  | B4 |  |  |  |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: SEND DTMF 4.10.2

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha identifier: "Send DTMF 2"

DTMF String: "1234567890"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 0B | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | 20 | 32 |
|  | AC | 05 | 21 | 43 | 65 | 87 | 09 |  |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 4.10.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.4.10.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.10.

##### 27.22.4.24.5 SEND DTMF (UCS2 Display in Chinese)

27.22.4.24.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.5.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters , as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.5.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.5.4 Method of test

27.22.4.24.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table. The elementary files are coded as USIM Application Toolkit default.

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

27.22.4.24.5.4.2 Procedure

Expected Sequence 5.1 (SEND DTMF, successful, UCS2 text in Chinese)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 5.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 5.1.1 |  |
| 7 | ME → USER | Display "你好" | ["Hello" in Chinese] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 5.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 5.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha Identifier

Text: "你好"

DTMF String: "1" pause "2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 05 | 80 | 4F | 60 | 59 | 7D | AC | 02 | C1 | F2 |  |  |

TERMINAL RESPONSE: SEND DTMF 5.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successful

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

##### 27.22.4.24.6 SEND DTMF (UCS2 Display in Katakana)

27.22.4.24.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.24.6.2 Conformance requirement

The ME shall support the Proactive UICC: Send DTMF facility as defined in:

- TS 31.111 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 8.12.2, clause 5.2, clause 8.6, clause 8.7, clause 8.2 and clause 8.44.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters , as defined in:

- ISO/IEC 10646. [17].

27.22.4.24.6.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive UICC command, and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.24.6.4 Method of test

27.22.4.24.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and only connected to the USS if the USS is mentioned in the sequence table. The elementary files are coded as USIM Application Toolkit default.

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

27.22.4.24.6.4.2 Procedure

Expected Sequence 6.1 (SEND DTMF, successful, UCS2 text)

Some details of the DTMF protocol have been left out for clarity.

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | User → ME | Set up a call to "+0123456789" |  |
| 2 | ME → USS | The ME attempts to set up a call to "+0123456789" |  |
| 3 | USS → ME | The ME receives the CONNECT message from the USS. |  |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: SEND DTMF 6.1.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: SEND DTMF 6.1.1 |  |
| 7 | ME → USER | Display "ル" | [Character in Katakana] |
| 8 | ME → USS | Start DTMF 1.1 | ["1"] |
| 9 | ME |  | No DTMF sending for 3 seconds ±20% |
| 10 | ME → USS | Start DTMF 1.2 | ["2"] |
| 11 | ME → UICC | TERMINAL RESPONSE: SEND DTMF 6.1.1 | [Command performed successfully] |
| 12 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 13 | User → ME | End the call |  |

PROACTIVE COMMAND: SEND DTMF 6.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: UICC

Destination device: Network

Alpha Identifier

Text: "ル"

DTMF String: "1" pause "2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
|  | 03 | 80 | 30 | EB | AC | 02 | C1 | F2 |  |  |  |  |

TERMINAL RESPONSE: SEND DTMF 6.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successful

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.24.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

#### 27.22.4.25 LANGUAGE NOTIFICATION

##### 27.22.4.25.1 Definition and applicability

See clause 3.2.2.

##### 27.22.4.25.2 Conformance Requirement

The ME shall conclude the command by sending TERMINAL RESPONSE (OK) to the UICC, as soon as possible after receiving the LANGUAGE NOTIFICATION proactive UICC command.

- TS 31.111 [15] clause 6.4.25 and clause 6.6.25.

##### 27.22.4.25.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the UICC after the ME receives the LANGUAGE NOTIFICATION proactive UICC command.

##### 27.22.4.25.4 Method of Test

27.22.4.25.4.1 Initial conditions

The ME is connected to the USIM Simulator.

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.

27.22.4.25.4.2 Procedure

Expected Sequence 1.1 (LANGUAGE NOTIFICATION)

See ETSI TS 102 384 [26] in clause 27.22.4.25.4.2, Expected Sequence 1.1.

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

See ETSI TS 102 384 [26] in clause 27.22.4.25.4.2, Expected Sequence 1.2.

##### 27.22.4.25.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 and 1.2.

#### 27.22.4.26 LAUNCH BROWSER

##### 27.22.4.26.1 LAUNCH BROWSER (No session already launched)

27.22.4.26.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.1.3 Test purpose

To verify that when the ME is in idle state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.1.4 Method of test

27.22.4.26.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Bearer Parameters

Precedence Class: 03

Delay Class: 04

Reliability Class: 03

Peak throughput class: 04

Mean throughput class: 31

Packet data protocol: 02 (IP)

GPRS Parameters

Network access name: TestGp.rs

User login: UserLog

User password: UserPwd

UICC/ME interface transport level

Transport format: UDP

Port number: 44444

Data destination address 01.01.01.01 (as an example)

Note: If a data destination address different to 01.01.01.01 is used then the network simulator setup and related UE settings might require a corresponding adaptation.

27.22.4.26.1.4.2 Procedure

Expected Sequence 1.1 (LAUNCH BROWSER, connect to the default URL)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared. The ME supports Launch Browser with Default URL] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1 | [connect to the default URL, "launch browser, if not already launched", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier |  |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1 | [Command performed successfully] |
| 7 | MEUSS | If command was performed successfully, the ME attempts to launch the session with the default browser parameters and the default URL. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the browser session to defined URL is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL empty

Alpha Identifier "Default URL"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 75 | 6C | 74 | 20 | 55 |
|  | 52 | 4C |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1 | [connect to defined URL, "launch browser, if not already launched, alpha identifier length=0] |
| 4 | ME → USER | No information should be displayed. |  |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to connect the URL specified in the LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL is properly connected. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier empty

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1F | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 00 |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1 | [connect to the defined URL, "launch browser, if not already launched, browser identity] |
| 4 | ME → USER | ME may display a default message of its own. |  |
| 5 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default browser session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

Browser Identity default

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Coding::

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 30 |
|  | 01 | 00 | 31 | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 |
|  | 78 | 78 | 2E | 79 | 79 | 79 | 2E | 7A | 7A | 7A |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 1.4 (LAUNCH BROWSER, only GPRS bearer specified and gateway/proxy identity, GPRS supported by USS)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode, GPRS supported by USS, GPRS supported by the ME and activated, the terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 4 | ME → USER | ME may display a default message |  |
| 5 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the browser session is properly established with the required bearer. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer GPRS

Gateway/Proxy id

DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding::

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 1.5 Void

Expected Sequence 1.6 (LAUNCH BROWSER, ME does not support Launch Browser with Default URL)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared. The ME does not support Launch Browser with Default URL] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1 | [connect to the default URL, "launch browser, if not already launched", no null alpha id.] |
| 4 | ME → USER | The ME may display the alpha identifier |  |
| 5 | USER → ME | If the ME displays the alpha identifier then the user confirms the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 1.6.1 ) | [ME unable to process command - Default URL unavailable] |
| 7 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |

TERMINAL RESPONSE: LAUNCH BROWSER 1.6.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Launch browser generic error code

Additional data Default URL unavailable

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 26 |
|  | 04 |  |  |  |  |  |  |  |  |  |  |  |

27.22.4.26.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6..

##### 27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

27.22.4.26.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 82.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.2.3 Test purpose

To verify that when the ME is already busy in a browser session, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

27.22.4.26.2.4 Method of test

27.22.4.26.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to a Wap gateway is required. The default browser parameters (IP address, gateway/proxy identity, called number…) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined in the test sequence.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.2.4.2 Procedure

Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The user is navigating in a browser session (not theURL defined in the test sequence). | [Browser is in use, the current session is not secured] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1 | [connect to the defined URL, "use the existing browser", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier |  |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1 | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause]  Usage of a new active tab in the browser is a valid behaviour (see note) |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved. |  |
| NOTE: Active tab indicates that web page is visible to the user. | | | |

PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2A | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0B | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the specified URL)

| Step | Direction | MESSAGE / Action | Comments |
| --- | --- | --- | --- |
| 0 | ME | The user is navigating in a browser session (not the URL defined in the test sequence). | [Browser is in use, the current session is not secured] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1 | [connect to the defined URL, "close the existing browser session and launch new browser session", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier |  |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1 | [Command performed successfully] |
| 7 | MEUSS | The ME closes the existing session and attempts to launch the session with the default browser parameters and the URL specified in LAUNCH BROWSER command.  IF A.1/155\_THEN it is a valid behaviour to keep other sessions/tabs open and start the session in a new active tab (see note). | [The UE has the option of maintaining the currently active PDP Context. The USS shall handle the request of additional URLs as defined in the initial conditions clause.] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected. |  |
| NOTE: Active tab indicates that web page is visible to the user. | | | |

PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser session

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2A | 81 | 03 | 01 | 15 | 03 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0B | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser session

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

| Step | Direction | MESSAGE / Action | Comments |
| --- | --- | --- | --- |
| 0 | ME | The user is navigating in a browser session (not the URL defined in the test sequence). | [Browser is in use, the current session is not secured] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1 | [connect to the defined URL, "launch browser, if not already launched] |
| 4 | ME → UICC | IF (NOT A.1/155)\_THEN  TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1  ELSE IF (A.1/155) THEN  TERMINAL RESPONSE:LAUNCH BROWSER 2.3.2 | [ME unable to process command - browser unavailable]  If browser supports multiple sessions/tabs, it is valid behaviour to open the session in a new active tab that does not interfere with other sessions (see note). |
| 5 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 6 | USER → ME | IF (NOT A.1/155)\_THEN the user verifies that the URL specified in LAUNCH BROWSER command has not been connected. |  |
| NOTE: Active tab indicates that web page is visible to the user. | | | |

PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Launch browser generic error code

Additional data Browser unavailable

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 26 |
|  | 02 |  |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 2.3.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

##### 27.22.4.26.3 LAUNCH BROWSER (UCS2 display in Cyrillic)

27.22.4.26.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.3.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.3.4 Method of test

27.22.4.26.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.3.4.2 Procedure

Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Cyrillic)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The user is navigating in a browser session (not the URL defined in the test sequence). | [Browser is in use, the current session is not secured] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1 | [connect to the defined URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays the alpha identifier "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1 | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL is connected; and the previous URL can be retrieved. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier

Data coding scheme: UCS2 (16 bits)

Text: "ЗДРАВСТВУЙТЕ"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 38 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 19 | 80 | 04 | 17 |
|  | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 | 04 | 21 | 04 | 22 |
|  | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 | 04 | 15 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 3.1.

##### 27.22.4.26.4 LAUNCH BROWSER (icons support)

27.22.4.26.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the browser session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.4.4 Method of test

27.22.4.26.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default browser parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default browser parameters.

The mobile is busy in a browser session, the user navigates in pages different from the URL defined by default in browser parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.The browser's cache shall have been cleared before execution of each sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.4.4.2 Procedure

Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured] |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1 | [connect to the defined URL, "use the existing browser", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier and the icon | ["Not self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Not self explan."

Icon identifier:

Icon qualifier: not self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 33 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 10 | 4E | 6F | 74 |
|  | 20 | 73 | 65 | 6C | 66 | 20 | 65 | 78 | 70 | 6C | 61 | 6E |
|  | 2E | 1E | 02 | 01 | 01 |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured] |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1 | [connect to the defined URL, "use the existing browser", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier Without the icon | ["Not self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B | [Command performed successfully but requested icon could not be displayed] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved. |  |

TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |

Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured] |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1 | [connect to the defined URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays only the icon | ["Self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Self explan."

Icon identifier:

Icon qualifier: self-explanatory

Icon identifier: record 1 in EF(IMG)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2F | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0C | 53 | 65 | 6C |
|  | 66 | 20 | 65 | 78 | 70 | 6C | 61 | 6E | 2E | 1E | 02 | 00 |
|  | 01 |  |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured] |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1 | [connect to the defined URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays only the alpha identifier | ["Self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B | [Command performed successfully] [Command performed successfully but requested icon could not be displayed] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL specified in LAUNCH BROWSER command is connected; and the previous URL can be retrieved. |  |

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |

27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

##### 27.22.4.26.5 LAUNCH BROWSER (support of Text Attribute)

27.22.4.26.5.1 LAUNCH BROWSER (support of Text Attribute – Left Alignment)

27.22.4.26.5.1.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111[15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.1.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the left alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.1.4 Method of test

27.22.4.26.5.1.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.1.4.2 Procedure

Expected Sequence 5.1 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Left Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.1.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with left alignment] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established.  The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.1.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.1.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [Message shall be formatted without left alignment. Remark: If left alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.1.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.1.

27.22.4.26.5.2 LAUNCH BROWSER (support of Text Attribute – Center Alignment)

27.22.4.26.5.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.2.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the center alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.2.4 Method of test

27.22.4.26.5.2.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.2.4.2 Procedure

Expected Sequence 5.2 (LAUNCH BROWSER, connect to the default URL with Text Attribute – Center Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.2.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.2.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with center alignment] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.2.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.2.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [Message shall be formatted without center alignment. Remark: If center alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 01 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.2.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.2.

27.22.4.26.5.3 LAUNCH BROWSER (support of Text Attribute – Right Alignment)

27.22.4.26.5.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.3.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the right alignment text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.3.4 Method of test

27.22.4.26.5.3.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Before execution of each sequence the browser's cache shall be cleared.

27.22.4.26.5.3.4.2 Procedure

Expected Sequence 5.3 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Right Alignment)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.3.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.3.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with right alignment] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.3.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.3.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [Message shall be formatted without right alignment. Remark: If right alignment is the ME's default alignment as declared in table A.2/18, no alignment change will take place] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 02 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.3.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.3.

27.22.4.26.5.4 LAUNCH BROWSER (support of Text Attribute – Large Font Size)

27.22.4.26.5.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the large font size text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.4.4 Method of test

27.22.4.26.5.4.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

Before execution of each sequence the browser's cache shall be cleared.

27.22.4.26.5.4.4.2 Procedure

Expected Sequence 5.4 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Large Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with large font size] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.4.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with normal font size] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with large font size] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1 | [Command performed successfully] |
| 25 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.4.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.4.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with normal font size] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 04 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.4.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.4.

27.22.4.26.5.5 LAUNCH BROWSER (support of Text Attribute – Small Font Size)

27.22.4.26.5.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.5.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.5.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the small font size text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.5.4 Method of test

27.22.4.26.5.5.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.5.4.2 Procedure

Expected Sequence 5.5 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Small Font Size)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with small font size] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.5.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with normal font size] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with small font size] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1 | [Command performed successfully] |
| 25 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.5.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.5.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with normal font size] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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

Colour: Dark Green Foreground, Bright Yellow Background

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 08 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.5.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.5.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.5.

27.22.4.26.5.6 LAUNCH BROWSER (support of Text Attribute – Bold on)

27.22.4.26.5.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.6.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.6.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the bold text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.6.4 Method of test

27.22.4.26.5.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.6.4.2 Procedure

Expected Sequence 5.6 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Bold On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with bold on] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.6.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with bold off] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with bold on] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1 | [Command performed successfully] |
| 25 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.6.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.6.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with bold off] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 10 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.6.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.6.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.6.

27.22.4.26.5.7 LAUNCH BROWSER (support of Text Attribute – Italic On)

27.22.4.26.5.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.7.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.7.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the italic text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.7.4 Method of test

27.22.4.26.5.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.7.4.2 Procedure

Expected Sequence 5.7 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Italic On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with italic on] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.7.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with italic off] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with italic on] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1 | [Command performed successfully] |
| 25 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.7.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.7.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with italic off] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 20 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.7.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.7.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.7.

27.22.4.26.5.8 LAUNCH BROWSER (support of Text Attribute – Underline On)

27.22.4.26.5.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.8.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.8.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the underline text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.8.4 Method of test

27.22.4.26.5.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.8.4.2 Procedure

Expected Sequence 5.8 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Underline On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with underline on] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.8.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with underline off] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with underline on] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1 | [Command performed successfully] |
| 25 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.8.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.8.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with underline off] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 40 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.8.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.8.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.8.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.8.

27.22.4.26.5.9 LAUNCH BROWSER (support of Text Attribute – Strikethrough On)

27.22.4.26.5.9.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.9.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.9.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the strikethrough text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.9.4 Method of test

27.22.4.26.5.9.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.9.4.2 Procedure

Expected Sequence 5.9 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Strikethrough On)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with strikethrough on] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.9.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with strikethrough off] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 19 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.1 |  |
| 20 | ME → UICC | FETCH |  |
| 21 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 22 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with strikethrough on] |
| 23 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 24 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1 | [Command performed successfully] |
| 25 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 26 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 27 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 28 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.9.3 |  |
| 29 | ME → UICC | FETCH |  |
| 30 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.9.3 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 31 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with strikethrough off] |
| 32 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 33 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1 | [Command performed successfully] |
| 34 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 35 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 36 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 80 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.9.3

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 3"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 33 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.9.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.9.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.9.

27.22.4.26.5.10 LAUNCH BROWSER (support of Text Attribute – Foreground and Background Colour)

27.22.4.26.5.10.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.5.10.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15, clause 8.31 and clause 8.70.

27.22.4.26.5.10.3 Test purpose

To verify that the ME performs a proper user confirmation with an alpha identifier according to the foreground and background colour text attribute configuration, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.5.10.4 Method of test

27.22.4.26.5.10.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

The ME is in idle mode. To ensure that there are no active PDP contexts established until the proactive command is fetched, the USS shall be configured to ignore any PDP context activation request before the LAUNCH BROWSER command is fetched.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

27.22.4.26.5.10.4.2 Procedure

Expected Sequence 5.10 (LAUNCH BROWSER, connect to the specified URL with Text Attribute – Foreground and Background Colour)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle mode and the browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.10.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.10.1 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 4 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with foreground and background colour according to the text attribute configuration] |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1 | [Command performed successfully] |
| 7 | MEUSS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. The user shall attempt to close the browser or shall at least set the ME to the idle screen. |  |
| 10 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 5.10.2 |  |
| 11 | ME → UICC | FETCH |  |
| 12 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 5.10.2 | [connect to the defined URL, "launch browser, if not already launched", no null alpha id] |
| 13 | ME → USER | ME displays the alpha identifier | [alpha identifier is displayed with ME's default foreground and background colour] |
| 14 | USER → ME | The user may have to confirm the launch browser. | [option: user confirmation] |
| 15 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1 | [Command performed successfully] |
| 16 | ME → USS | The ME attempts to launch the session with the default Wap parameters and the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 17 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 18 | USER → ME | The user verifies that the default Wap session is properly established. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.10.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 1"

Text Attribute

Formatting position: 0

Formatting length: 13

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 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 31 | D0 | 04 |
|  | 00 | 0D | 00 | B4 |  |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 5.10.2

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier "Defined URL 2"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 2C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 0D | 44 | 65 | 66 |
|  | 69 | 6E | 65 | 64 | 20 | 55 | 52 | 4C | 20 | 32 |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 5.10.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.5.10.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 5.10.

##### 27.22.4.26.6 LAUNCH BROWSER (UCS2 Display in Chinese)

27.22.4.26.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.6.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Chinese characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.6.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.6.4 Method of test

27.22.4.26.6.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of the test sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.6.4.2 Procedure

Expected Sequence 6.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Chinese)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The user is navigating in a Wap session (not the URL specified in the test sequence). | [Browser is in use, the current session is not secured] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 6.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 6.1.1 | [connect to the defined URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays the alpha identifier  "你好" | ["Hello" in Chinese] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 6.1.1 | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL is connected; and the previous URL can be retrieved. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 6.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier

Data coding scheme: UCS2 (16 bits)

Text: "你好"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 05 | 80 | 4F | 60 |
|  | 59 | 7D |  |  |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 6.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

##### 27.22.4.26.7 LAUNCH BROWSER (UCS2 Display in Katakana)

27.22.4.26.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.7.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, optional clause 8.49, optional clause 8.50, clause 8.15 and clause 8.31.

Additionally the ME shall support the UCS2 facility for the coding of the Katakana characters, as defined in:

- ISO/IEC 10646 [17].

27.22.4.26.7.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the UICC.

27.22.4.26.7.4 Method of test

27.22.4.26.7.4.1 Initial conditions

The ME is connected to the USIM Simulator and the USS.

The elementary files are coded as USIM Application Toolkit default.

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

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL …) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

For URL requests resulting from the LAUNCH BROWSER command execution the USS shall be configured to respond with an HTTP status error code (4xx "Client Error" or 5xx "Server Error") to URL requests which do not match the Default URL or the URL provided in the proactive command. At the same time the USS shall ignore these URL requests regarding the test case verdict generation.

The browser's cache shall have been cleared before execution of the test sequence.

The Bearer Parameters defined in 27.22.4.26.1.4.1 shall be used.

27.22.4.26.7.4.2 Procedure

Expected Sequence 7.1 (LAUNCH BROWSER, use the existing browser, connect to the specified URL, UCS2 in Katakana)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The user is navigating in a Wap session (not the URL defined in the test sequence). | [Browser is in use, the current session is not secured]] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 7.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 7.1.1 | [connect to the defined URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays the alpha identifier  "ル" | [Character in Katakana] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 7.1.1 | [Command performed successfully] |
| 7 | MEUSS | The ME does not close the existing session and attempts to connect the URL specified in LAUNCH BROWSER command. | [The USS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the URL is connected; and the previous URL can be retrieved. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 7.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Alpha Identifier

Data coding scheme: UCS2 (16 bits)

Text: "ル"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
|  | 00 | 05 | 03 | 80 | 30 | EB |  |  |  |  |  |  |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 03 | 80 | 30 | EB |

TERMINAL RESPONSE: LAUNCH BROWSER 7.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: use the existing browser

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

##### 27.22.4.26.8 LAUNCH BROWSER (NG-RAN bearer)

27.22.4.26.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.8.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive UICC Command as defined in:

- TS 31.111 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 8.6, clause 8.7, clause 8.48, clause 9.2, clause 8.2, clause 8.47, clause 8.49, clause 8.50, clause 8.15 and clause 8.31.

27.22.4.26.8.3 Test purpose

To verify that when the ME is in connected state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.8.4 Method of test

27.22.4.26.8.4.1 Initial conditions

The ME is connected to the USIM Simulator and the NG-SS. NG-SS is configured with the IMSI within the USIM application, the home domain name, public and private user identities together with the shared secret key of IMS AKA algorithm, related to the IMS private user identity (IMPI) that is configured on the UICC card equipped into the ME. NG-SS is able to perform IMS AKA authentication for the IMPI, according to 3GPP TS 33.203 [45] clause 6.1.

The NG-RAN parameters of the NG-SS are:

- Mobile Country Code (MCC) = 001;

- Mobile Network Code (MNC) = 01;

- Tracking Area Code (TAC) = 000001.

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

For sequence 8.1 the default NG-RAN UICC is used. Sequences 8.2, 8.3, 8.4 and 8.5 use the default NG-RAN ISIM‑UICC. The default NG-RAN parameters are used.

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01'.

The browser's cache shall have been cleared before execution of the test sequence.

For Expected Sequence 8.2, Service n°30 "Call Control by USIM" shall be available in **EFUST.**

27.22.4.26.8.4.2 Procedure

Expected Sequence 8.1 (LAUNCH BROWSER, only NG-RAN bearer specified and gateway proxy identity)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in connected mode, NG-RAN supported by the ME and activated, the terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.1.1 |  |
| 2 | ME → UICC | FETCH |  |
| 3 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.1.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 4 | ME → USER | ME may display a default message |  |
| 5 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 6 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 8.1.1 | [Command performed successfully] |
| 7 | ME NG-SS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 8 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 9 | USER → ME | The user verifies that the browser session is properly established with the required bearer. |  |

PROACTIVE COMMAND: LAUNCH BROWSER 8.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer NG-RAN

Gateway/Proxy id DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 8.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 8.2 (LAUNCH BROWSER, Trigger LAUNCH BROWSER by CALL CONTROL)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The ME is configured to register for IMS after switch on. | [The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | User  ME | The ME is made to attempt an IMS voice call to "+01234567890123456789" |  |
| 2 | ME  UICC | ENVELOPE CALL CONTROL 8.2.1 |  |
| 3 | UICC → ME | CALL CONTROL RESULT 8.2.1 | not Allowed |
| 4 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.2.1 |  |
| 5 | ME → UICC | FETCH |  |
| 6 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.2.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 7 | ME → USER | ME may display a default message |  |
| 8 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 9 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 8.2.1 | [Command performed successfully] |
| 10 | ME NG-SS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 11 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 12 | USER → ME | The user verifies that the browser session is properly established with the required bearer. |  |

ENVELOPE CALL CONTROL 8.2.1

Logically:

Device identities

Source device: ME

Destination device: UICC

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

Mobile Country Codes (MCC): 001

Mobile Network Codes (MNC): 01

Tracking Area Code (TAC) = 000001;

NG-RAN Cell Identifier (NCI): 0001 (36 bits);

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D4 | Note 1 | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
|  | 76 | 98 | 10 | 32 | 54 | 76 | 98 | Note 2 | Note 3 | 13 | 0B | 00 |
|  | F1 | 10 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 1F |  |  |

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

CALL CONTROL RESULT 8.2.1

Logically:

Call control result: '01' = not Allowed

Coding:

|  |  |  |
| --- | --- | --- |
| BER-TLV: | 01 | 00 |

PROACTIVE COMMAND: LAUNCH BROWSER 8.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer NG-RAN

Gateway/Proxy id DCS unpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 8.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 8.3 (LAUNCH BROWSER, LAUNCH BROWSER, Trigger LAUNCH BROWSER by MT Call event)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The ME is configured to register for IMS after switch on. | [The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | UICC  ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 8.3.1 |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 8.3.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 8.3.1 |  |
| 5 | NG-SSME | CALL SET UP | VoNR call shall be set up with the P-Asserted-Identity in the SIP INVITE message matched with Address in the EVENT DOWNLOAD - MT CALL 8.3.1 |
| 6 | ME  UICC | ENVELOPE: EVENT DOWNLOAD - MT Call 8.3.1 |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.3.1 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.3.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 10 | ME → USER | ME may display a default message |  |
| 11 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 12 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 8.3.1 | [Command performed successfully] |
| 13 | ME NG-SS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 14 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 15 | USER → ME | The user verifies that the browser session is properly established with the required bearer. |  |

PROACTIVE COMMAND: SET UP EVENT LIST 8.3.1

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: MT call

Coding:

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

TERMINAL RESPONSE: SET UP EVENT LIST 8.3.1

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 |

EVENT DOWNLOAD - MT CALL 8.3.1

Logically:

Event list: MT call event

Device identities

Source device: Network

Destination device: UICC

Transaction identifier:

TI value: 0 (bit 5-7) - If A.1/150 is supported, this shall not be verified

TI flag: 0 (bit 8)

Address:

TON - not verified

NPI - not verified

Dialling number string "9876"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0F | 19 | 01 | 00 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
|  | 86 | 03 | xx | 89 | 67 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 8.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer NG-RAN

Gateway/Proxy id DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 8.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 8.4 (LAUNCH BROWSER, Trigger LAUNCH BROWSER during mobile originated call)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The ME is configured to register for IMS after switch on. | [The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | User → ME | Set up an IMS voice call to "+01234567890123456789" | Call needs to be connected |
| 2 | ME → NG-SS | Establish IMS voice call | The established IMS voice call needs to be held |
| 3 | UICC →ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.4.1 |  |
| 4 | ME → UICC | FETCH |  |
| 5 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.4.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 6 | ME → USER | ME may display a default message |  |
| 7 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 8 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 8.4.1 | [Command performed successfully] |
| 9 | ME → NG-SS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 10 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 11 | USER → ME | The user verifies that the browser session is properly established with the required bearer. | The IMS voice call can be ended |

PROACTIVE COMMAND: LAUNCH BROWSER 8.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer NG-RAN

Gateway/Proxy id DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 8.4.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

Expected Sequence 8.5 (LAUNCH BROWSER, Trigger LAUNCH BROWSER during mobile terminated call)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME | The ME is configured to register for IMS after switch on. | [The terminal might need to be configured with an entry linking the Gateway/Proxy Identity in the proactive command with the corresponding connectivity parameters in the mobile. The browser's cache shall have been cleared.] |
| 1 | NG-SS ME | CALL SET UP |  |
| 2 | USER → ME | Accept Call Set Up | Call needs to be connected and held |
| 3 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.5.1 |  |
| 4 | ME → UICC | FETCH |  |
| 5 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.5.1 | [connect to the defined URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 6 | ME → USER | ME may display a default message |  |
| 7 | USER → ME | The user may confirm the launch browser. | [option: user confirmation] |
| 8 | ME → UICC | TERMINAL RESPONSE: LAUNCH BROWSER 8.5.1 | [Command performed successfully] |
| 9 | ME  NG-SS | The ME attempts to connect the URL specified in LAUNCH BROWSER command using the requested bearer and proxy identity | [The NG-SS shall handle the request of additional URLs as defined in the initial conditions clause] |
| 10 | UICC → ME | PROACTIVE UICC SESSION ENDED |  |
| 11 | USER → ME | The user verifies that the browser session is properly established with the required bearer. | Call can be ended |

PROACTIVE COMMAND: LAUNCH BROWSER 8.5.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: UICC

Destination device: ME

URL <http://xxx.yyy.zzz> (Note: this URL shall be different from the default URL, but it can be reached from the gateway defined by default in the browser parameters of the mobile)

Bearer NG-RAN

Gateway/Proxy id DCSunpacked, 8 bits data

Text string abc.def.ghi.jkl (different from the default IP address)

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
|  | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
|  | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 32 | 01 | 03 | 0D | 10 |
|  | 04 | 61 | 62 | 63 | 2E | 64 | 65 | 66 | 2E | 67 | 68 | 69 |
|  | 2E | 6A | 6B | 6C |  |  |  |  |  |  |  |  |

TERMINAL RESPONSE: LAUNCH BROWSER 8.5.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME

Destination device: UICC

Result

General Result: Command performed successfully

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |

27.22.4.26.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1 to 8.5.