**3GPP TSG-CT WG6 Meeting #112-eC6-220465**

**E-Meeting, 23rd – 26th August 2022**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **31.124** | **CR** | **0651** | **rev** | **-** | **Current version:** | **16.8.0** |  |
|  |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <http://www.3gpp.org/Change-Requests>.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps | **X** | ME | **X** | Radio Access Network |  | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Add a Expected sequence-Trigger LAUNCH BROWSER by MT Call event |
|  |  |
| ***Source to WG:*** | China Mobile |
| ***Source to TSG:*** | CT6 |
|  |  |
| ***Work item code:*** | TEI16 |  | ***Date:*** | 2022-08-17 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | LAUNCH BROSWER can be used in many ways to provide services for users, for example, LAUNCH BROSWER may be used during a call to to provide helpful information for customer service, or triggered by CALL CONTROL or MT CALL event to provide more diverse USAT services.To support the above scenarios, some test cases about LAUNCH BROSWER are need for MEs. |
|  |  |
| ***Summary of change:*** | Add a new test case of Trigger LAUNCH BROWSER by MT Call event. |
|  |  |
| ***Consequences if not approved:*** | The current test will not include test procedure for this aspect of LAUNCH BROWSER. |
|  |  |
| ***Clauses affected:*** | 3.4, 27.22.4.26 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 3.4 Applicability table

| **Item** | **Description** | **Tested feature defined in Release** | **Test sequence(s)** | **R99 ME** | **Rel-4 ME** | **Rel-5 ME** | **…** | **Rel-15-ME** | **Rel-16 ME** | Terminal Profile | **Network Dependency** | **Support** | **Additional test case execution recommendation** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| … | … | … | … | … | … | … | … | … | … |  | … | … | … |
| 30 | **LAUNCH BROWSER27.22.4.26** |  |  |  |  |  |  |  |  |  |  |  |  |
| … | … | … | … | … | … | … | … | … |  | … | … | … |
| Trigger LAUNCH BROWSER by MT Call event | Rel-16 | 8.X |  |  |  |  |  | C231 | E.1/71 AND ~~E.1/98 AND~~ E.1/110 AND E.1/111 | NG-RAN |  |  |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next of change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 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 idle state, it launches properly the browser session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.8.4 Method of test

27.22.4.26.8.4.1 Initial conditions

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

The default NG-RAN UICC, the default NG-RAN parameters and the following URSP rules stored in the ME are used:

URSP:

Rule Precedence =1

Traffic Descriptor:

* DNN=TestGp.rs

Route Selection Descriptor:

* Precedence=1
* Network Slice Selection, S-NSSAI: 01 01 01 02 (ST: MBB, SD: 010102)
* SSC Mode Selection: SSC Mode 2
* Access Type preference: 3GPP access

Rule Precedence = <lowest priority>

Traffic Descriptor: \*

Route Selection Descriptor:

* Precedence =1
* Network Slice Selection, S-NSSAI: 01 01 01 01 (ST: MBB, SD: 010101)
* SSC Mode Selection: SSC Mode 3
* DNN Selection: internet

The Allowed S-NSSAI list is configured in NG-SS as '01 01 01 01', '01 01 01 02' and '01 01 01 03'.

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

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 idle 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 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 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.X (LAUNCH BROWSER, LAUNCH BROWSER, Trigger LAUNCH BROWSER by MT Call event)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Direction | MESSAGE / Action | Comments |
| 0 | ME |  | [The ME is in idle 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: SET UP EVENT LIST 8.X.1 |  |
| 2 | ME  UICC | FETCH |  |
| 3 | UICC  ME | PROACTIVE COMMAND: SET UP EVENT LIST 8.X.1 |  |
| 4 | ME  UICC | TERMINAL RESPONSE: SET UP EVENT LIST 8.X.1 |  |
| 5 | NG-SSME  | CALL SET UP  |  |
| 6 | ME  UICC | ENVELOPE: EVENT DOWNLOAD - MT Call 8.X.1 |  |
| 7 | UICC → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 8.X.1 |  |
| 8 | ME → UICC | FETCH |  |
| 9 | UICC → ME | PROACTIVE COMMAND: LAUNCH BROWSER 8.X.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.X.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.X.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.X.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.X.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 Unknown

 NPI "ISDN / telephone numbering plan"

 Dialling number string "9876"

Coding:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BER-TLV: | D6 | 0F | 19 | 01 | 00 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
|  | 86 | 03 | 81 | 89 | 67 |  |  |  |  |  |  |  |

PROACTIVE COMMAND: LAUNCH BROWSER 8.X.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.X.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 |

27.22.4.26.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1 to 8.X.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End of change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*