**3GPP TSG-CT WG1 Meeting #134-eC1-221827**

**E-meeting, 17-25 February 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.237** | **CR** | **1303** | **rev** | **-** | **Current version:** | **17.0.0** |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network |  |

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| ***Title:***  | "SRVCC handover cancelled, IMS session re-establishment required" indicator via NG-RAN |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | IMSProtoc17, 5G\_SRVCC |  | ***Date:*** | 2022-02-22 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-17 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | The "SRVCC handover cancelled, IMS session re-establishment required" indicator is introduced by CR# 3981 to TS 24.501. Handling in the IMS client should be defined. |
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| ***Summary of change:*** | Handling of the indicator is defined. |
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| ***Consequences if not approved:*** | The stage 2 requirement introduced by CR#0373 to TS 23.216 is not implemented. |
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| ***Clauses affected:*** | 12.2.4.1, 12.2.4.2, 12.2A.6 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 23.216 CR 0373  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

#### 12.2.4.1 Confirmed dialog

If the SC UE engaged in one or more ongoing IMS sessions and:

- receives a SM NOTIFICATION message containing an "SRVCC handover cancelled, IMS session re-establishment required" as described in 3GPP TS 24.008 [8] or 3GPP TS 24.301 [52] or receives an "SRVCC handover cancelled, IMS session re-establishment required" indicator from the lower layer as described in 3GPP TS 24.501 [98] depending on the access in use; or

- does not successfully retune to the 3GPP UTRAN or 3GPP GERAN after it receives the handover command from the eNodeB (as described in 3GPP TS 36.331 [62]) or from the NodeB (as described in 3GPP TS 25.331 [61]);

then the SC UE shall send a SIP re-INVITE request containing:

1) an SDP offer, including the media characteristics as used in the existing dialog; and

2) a Reason header field containing protocol "SIP" and reason parameter "cause" with value "487" as specified in IETF RFC 3326 [57] and with reason-text text set to either "handover cancelled" or "failure to transition to CS domain";

by following the rules of 3GPP TS 24.229 [2] in each transferred session.

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

#### 12.2.4.2 Early dialog

If the SC UE is engaged in a session in early dialog state and:

- receives a SM NOTIFICATION message containing an "SRVCC handover cancelled, IMS session re-establishment required" as described in 3GPP TS 24.008 [8] or 3GPP TS 24.301 [52] or receives an "SRVCC handover cancelled, IMS session re-establishment required" indicator from the lower layer as described in 3GPP TS 24.501 [98] depending on the access in use; or

- does not successfully retune to the 3GPP UTRAN or 3GPP GERAN after it receives the handover command from the eNodeB (as described in 3GPP TS 36.331 [62]) or from the NodeB (as described in 3GPP TS 25.331 [61]);

then the SC UE shall:

a) send a SIP UPDATE request containing:

1) an SDP offer, including the media characteristics as used in the existing dialog; and

2) a Reason header field containing protocol "SIP" and reason parameter "cause" with value "487" as specified in IETF RFC 3326 [57], and with reason-text set to either "handover cancelled" or "failure to transition to CS domain";

 by following the rules of 3GPP TS 24.229 [2] in each transferred session; and

b) if the SC UE is a terminating side UE and has already sent a CC CONNECT on the target access leg, send a SIP 200 (OK) response to the SIP INVITE request received on the source access leg.

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

### 12.2A.6 Abnormal cases

If the SC UE:

- receives a NOTIFICATION message containing an "SRVCC handover cancelled, IMS session re-establishment required" as described in 3GPP TS 24.301 [52] or receives an "SRVCC handover cancelled, IMS session re-establishment required" indicator from the lower layer as described in 3GPP TS 24.501 [98] depending on the access in use; or

- does not successfully transition to UTRAN after it receives the handover command (as described in 3GPP TS 36.331 [62]);

then:

- if the SC UE is engaged in one or more ongoing IMS sessions, the SC UE shall send a SIP re-INVITE request in accordance with subclause 12.2.4.1; and

- if the SC UE is engaged in a session in early dialog state, the SC UE shall send a SIP UPDATE request, in accordance with subclause 12.2.4.2.