**SA WG2 Meeting #149eS2-2200285**

**February 14th – 25th, 2022; Elbonia (revision of S2-220)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.216** | **CR** | **0373 ???** | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Failure cases for SRVCC from NR to UTRAN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | S2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_SRVCC | | | | |  | ***Date:*** | | | 2022-02-04 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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 can be 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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 23.216 has a clause 8.1 on Failure in EUTRAN/UTRAN (HSPA) to 3GPP UTRAN/GERAN (v)SRVCC but none on Failure in 5G-SRVCC from NG-RAN to 3GPP UTRAN | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add a new clause 8.X on Failure in 5G-SRVCC from NG-RAN to 3GPP UTRAN | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Failure in 5G-SRVCC from NG-RAN to 3GPP UTRAN are unspecified | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.X (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **x** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

*FIRST CHANGE*

## 8.X Failure in 5G-SRVCC from NG-RAN to 3GPP UTRAN

Such failures are handled as defined for Failure in EUTRAN/UTRAN (HSPA) to 3GPP UTRAN/GERAN (v)SRVCC in clause 8.1 with following modifictaions

* When as defined in clause 8.1.1a.1 the MSC Server rejects a PS To CS Request with a Reject cause pointing to either permanent or temporary "Session Transfer leg establishment error", the MME-SRVCC shall transfer this information to the AMF. The AMF indicates to the NG RAN the Handover preparation failure. The AMF may take an indication of "permanent Session Transfer leg establishment error" into account to prevent further SRVCC handover attempts.
* When as defined in clause 8.1.1a.2, the MSC Server indicates an error cause pointing to either permanent or temporary "Session Transfer leg establishment error" in PS to CS complete notification message, the AMF based on the absence of a Forward Relocation Complete Notification determines the failure of the SRVCC procedure.
* When as defined in clause 8.1.2, there is a Failure after UE receives HO command, the UE attempts to return to NG-RAN and the core network (AMF, MME-SRVCC, MSC Server) shall take no (v)SRVCC specific action in the event of not receiving the Handover Complete message from the UE.
* When as defined in clause 8.1.3, the source RAN (NG-RAN) decides to terminate the handover procedure before its completion, the AMF shall attempt to have the MME-SRVCC trigger, at the MSC Server enhanced for SRVCC, handover cancellation procedures. The AMF shall also send a session reestablishment trigger notification to UE to start the recovery procedure if it received a notification that the Session Transfer procedure is in progress.
* Same requirements as defined in clause 8.1.4, for Handover Failure due to alerting/pre-alerting state

*NEXT CHANGE (2)*

*END OF CHANGES*