**3GPP TSG-RAN WG3 Meeting #117bis-eR3-226013**

E-Meeting, 10th – 18th Oct 2022

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **37.340** | **CR** |  | **rev** |  | **Current version:** | **17.2.0** |  |
|  |
| *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)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | Correction of UE History Information for CHO |
|  |  |
| ***Source to WG:*** | Samsung, ZTE, Ericsson |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh |  | ***Date:*** | 2022-10-10 |
|  |  |  |  |  |
| ***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 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)* |
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| ***Reason for change:*** | The Source NG-RAN node sends UE History Information through Handover Request message to the target NG-RAN node. The UE Stayed Time in the source PCell and source PSCell is determined at this point. For CHO, the UE still stay in source PCell and source PSCell until UE executes handover. The UE Stayed Time in the source PCell and source PSCell sent to the target in Handover Request message is shorter than actual stayed time.So, if the CHO preparation is made shortly after a UE attached to the source PCell and source PSCell, the RAN misjudges that the UE has stayed in the source PCell or source PSCell for a very short time. And the RAN may restrict the handover to source source PCell and source PSCell to reduce ping-pong handover frequency. |
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| ***Summary of change:*** | The target gNB behaviour to update the UE stay time in source PSCell for CHO. |
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| ***Consequences if not approved:*** | The ping-pong detection may be wrong. |
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| ***Clauses affected:*** | 13.3 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  |  TS38.300 CR.. |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

<<<<<<<<<<<<<<<<<<<< Start of the First Change >>>>>>>>>>>>>>>>>>>>

## 13.3 SCG UE history information

The MN stores and correlates the UE History Information from MN and SN(s) as long as the UE stays in MR-DC, forwards UE History Information and optional UE History Information from the UE to its connected SNs. The resulting information is then used by SN for dual-connectivity operation. The SN is in charge of collecting SCG UE history information and providing the collected information to the MN.

The SN shall provide the collected SCG UE history information, if available, to the MN in the following procedures:

- the SN Release, and SN initiated SN Change procedures

- the MN initiated SN Modification procedure if requested by the MN in this procedure

- the SN initiated SN modification procedure upon PSCell change if subscribed in the SN Addition procedure

When the target NG-RAN node receives the SCG UHI from the source NG-RAN node via Handover Request message for CHO, the target NG-RAN node updates the time UE stayed in cell of the latest PSCell entry (i.e. the source PSCell) when the UE successfully accesses to a candidate cell of the target NG-RAN node. The updated value of the time UE stayed in the source PSCell is equal to the value received from the source NG-RAN node during the Handover Preparation plus the time from receiving Handover Request message from the source NG-RAN node to receiving RRC Reconfiguration Complete message from the UE.

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