**3GPP TSG-RAN3 Meeting #108-e R3-20xxxx**

**1st - 11th June 2020 E-Meeting**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
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|  | **38.470** | **CR** | **0063** | **rev** | **4** | **Current version:** | **16.1.0** |  |
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| *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>.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | TS38.470 Stage2 Introduction of Mobility Enhancement Features |
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| ***Source to WG:*** | ZTE, China Telecom, China Unicom |
| ***Source to TSG:*** | R3 |
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| ***Work item code:*** | NR\_Mob\_enh-Core |  | ***Date:*** | 2020-06-18 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | RAN3 has concluded and specified some stage3 level behaviors for UE mobility enhancement, such as DAPS and CHO features, which also impacts F1 interface, however the stage2 general aspects for F1 interface are still missing. |
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| ***Summary of change:*** | To introduce stage2 general descriptions for mobility enhancement features over F1 interface.Impact analysis:Impact assessment towards the previous version of the specification (same release): * This CR has impact from functional point of view.
* The impact can be considered isolated because it introduces new mobility enhancement features over F1 interface.
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| ***Consequences if not approved:*** | The stage2 general aspects for mobility enhancement over F1 interface are missing. |
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| ***Clauses affected:*** | 5.2.3 |
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|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | - Endorsed as BLCR in R3-200400 after RAN3#107-e.- Revision in R3-201554 based on v16.1.0.- Revision in R3-202574, adding up impact analysis.- Revision in R3-203034, submit for RAN3#108-e.- Revision in R3-20xxxx, incorporating agreed TPs: “R3-203218”.   |

**----------------------------------------------------------First Change--------------------------------------------------------**

### 5.2.3 F1 UE context management function

The F1 UE context management function supports the establishment and modification of the necessary overall UE context.

The establishment of the F1 UE context is initiated by the gNB-CU and accepted or rejected by the gNB-DU based on admission control criteria (e.g., resource not available).

The modification of the F1 UE context can be initiated by either gNB-CU or gNB-DU. The receiving node can accept or reject the modification. The F1 UE context management function also supports the release of the context previously established in the gNB-DU. The release of the context is triggered by the gNB-CU either directly or following a request received from the gNB-DU. The gNB-CU request the gNB-DU to release the UE Context when the UE enters RRC\_IDLE or RRC\_INACTIVE.

This function can be also used to manage DRBs and SRBs, i.e., establishing, modifying and releasing DRB and SRB resources. The establishment and modification of DRB resources are triggered by the gNB-CU and accepted/rejected by the gNB-DU based on resource reservation information and QoS information to be provided to the gNB-DU. For each DRB to be setup or modified, the S-NSSAI may be provided by gNB-CU to the gNB-DU in the UE Context Setup procedure and the UE Context Modification procedure.

The mapping between QoS flows and radio bearers is performed by gNB-CU and the granularity of bearer related management over F1 is radio bearer level. For NG-RAN, the gNB-CU decides an aggregated DRB QoS profile for each radio bearer based on received QoS flow profile, and provides both aggregated DRB QoS profile and QoS flow profile to the gNB-DU, and the gNB-DU either accepts the request or rejects it with appropriate cause value. With this function, gNB-DU could also notify gNB-CU whether the QoS for already established DRBs is not fulfilled any longer or it is fulfilled again. To support packet duplication for intra-gNB-DU CA as described in TS 38.300 [8], one data radio bearer should be configured with two GTP-U tunnels between gNB-CU and a gNB-DU.

With this function, gNB-CU requests the gNB-DU to setup or change of the SpCell (as defined in TS 38.321 [10]) for the UE, and the gNB-DU either accepts or rejects the request with appropriate cause value. This function also enables the gNB-DU to inform the gNB-CU of which cell the UE has successfully accessed during conditional mobility.

With this function, the gNB-CU requests the setup of the SCell(s) at the gNB-DU side, and the gNB-DU accepts all, some or none of the SCell(s) and replies to the gNB-CU. The gNB-CU requests the removal of the SCell(s) for the UE.

With this function, the gNB-CU indicates the UL UE AMBR limit to the gNB-DU, and the gNB-DU enforces the indicated limit.

With this function, the gNB-DU indicates that a bearer, or a UE is inactive or active. The gNB-CU consolidates all the serving gNB-DUs for the UE and takes further action.

With this function, the gNB-CU indicates the gNB-DU that the UE context concerns mobility enhancement operation, and the gNB-DU takes corresponding actions.

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| **\*\*\* Next change, skipped text not changed \*\*\*** |

### 6.1.2 Context Management procedures

The F1 Context management procedures are listed below:

- UE Context setup procedure

- UE Context Release Request (gNB-DU initiated) procedure

- UE Context Release (gNB-CU initiated) procedure

- UE Context Modification (gNB-CU initiated) procedure

- UE Context Modification Required (gNB-DU initiated) procedure

- UE Inactivity Notification procedure

- Notify procedure

- Access Success procedure

<End>