**3GPP TSG-RAN3 Meeting #108-e *R3-204077***

**E-Meeting, 01 - 11 June 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **38.460** | **CR** | **0039** | **rev** |  | **Current version:** | **16.0.0** |  |
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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 |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | PDCP duplication with more than 2 entities for E1 stage 2  |
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| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | RAN3 |
|  |  |
| ***Work item code:*** | NR\_IIOT-Core |  | ***Date:*** | 2020-6-4 |
|  |  |  |  |  |
| ***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:*** | Currently up to four GTP-U tunnels can be supported for PDCP duplication with more than two RLC enitites. The stage 2 specification should be updated accordingly.  |
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| ***Summary of change:*** | For PDCP duplication with more than two entities, update one data radio bearer should be configured with at least two GTP-U tunnels between gNB-CU and a gNB-DU.  |
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| ***Consequences if not approved:*** | PDCP duplication with more than two entities is not reflected in stage 2. |
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| ***Clauses affected:*** | 5.1.2 |
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|  | **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:*** |  |

**----------------------------------------------------------Change Begin of 38.460------------------------------------------------------**

### 5.1.2 E1 bearer context management function

The establishment of the E1 bearer context is initiated by the gNB-CU-CP and accepted or rejected by the gNB-CU-UP based on admission control criteria (e.g., resource not available).

The modification of the E1 bearer context can be initiated by either gNB-CU-CP or gNB-CU-UP. The receiving node can accept or reject the modification. The E1 bearer context management function also supports the release of the bearer context previously established in the gNB-CU-UP. The release of the bearer context is triggered by the gNB-CU-CP either directly or following a request received from the gNB-CU-UP.

This function is used to setup and modify the QoS-flow to DRB mapping configuration. The gNB-CU-CP decides flow-to-DRB mapping and provides the generated SDAP and PDCP configuration to the gNB-CU-UP. The gNB-CU-CP also decides the Reflective QoS flow to DRB mapping. For each PDU Session Resource to be setup or modified, the S-NSSAI, shall be provided in the E1 bearer context setup procedure and may be provided in the E1 bearer context modification procedure by gNB-CU-CP to the gNB-CU-UP.

This function is used for the gNB-CU-CP to send the security information to the gNB-CU-UP.

This function is used for the gNB-CU-UP to notify the event of DL data arrival detection to the gNB-CU-CP. With this function, the gNB-CU-UP requests gNB-CU-CP to trigger paging procedure over F1 or Xn to support RRC Inactive state.

This function is used for the gNB-CU-UP to notify the gNB-CU-CP that an UL packet including a QFI value in the SDAP header not configured by the *Flow Mapping Information* IE is received for the first time at the default DRB. The gNB-CU-CP can take further action if needed.

This function is used for the gNB-CU-UP to notify the event of user inactivity to the gNB-CU-CP. With this function, the gNB-CU-UP indicates that the inactivity timer associated with a bearer, a PDU session or a UE expires, or that user data is received for the bearer, the PDU session or the UE whose inactivity timer has expired. The gNB-CU-CP consolidates all the serving gNB-CU-UPs for the UE and takes further action.

This function is used for the gNB-CU-UP to report data volume to the gNB-CU-CP.

This function is used for the gNB-CU-CP to notify the suspension and resumption of bearer contexts to the gNB-CU-UP.

This function also allows to support CA based packet duplication as described in TS 38.300 [6], i.e. one data radio bearer should be configured with at least two GTP-U tunnels between gNB-CU-UP and a gNB-DU.

**----------------------------------------------------------End of Change 38.460--------------------------------------------------------**