**3GPP TSG-RAN3 Meeting #122R3-237836**

**Chicago, US, 13-17 Nov 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.420** | **CR** | **0037** | **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:*** | (BL CR to 38.420) Support of mobile IAB | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Lenovo | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_mobile\_IAB-Core | | | | |  | ***Date:*** | | | 2023-11-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Add changes to support mobile IAB. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The following changes are made:   1. Add definitions for mobile IAB-node and RRC-terminating IAB-donor of the mobile IAB-node. 2. Support IAB Transport Migration function between F1-terminating IAB-donor-CU and RRC-terminating IAB-donor-CU of a mobile IAB-node. 3. Support IAB Resource Coordination function between F1-terminating IAB-donor-CU and RRC-terminating IAB-donor-CU of a mobile IAB-node. 4. Delete “-CU” in definitions of F1-terminating IAB-donor-CU and Non-F1-terminating IAB-donor-CU. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The mobile IAB cannot be supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 3.1, 5.2.10.2, 5.2.10.3, 6.2.10 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **x** |  | Other core specifications | | | | TS 38.423 | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

-------------------------------------------Start of Change------------------------------------------

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**Boundary IAB-node:** as defined in TS 38.401 [2].

**corresponding node:** as defined in TS 38.425 [7].

**F1-terminating IAB-donor**: as defined in TS 38.401 [2].

**IAB-DU:** as defined in TS 38.300 [8].

**IAB-MT:** as defined in TS 38.300 [8].

Mobile IAB-node: as defined in TS 38.300 [8].

**Non-F1-terminating IAB-donor**: as defined in TS 38.401 [2].

**NG-RAN node:** as defined in TS 38.300 [8].

RRC-terminating IAB-donor: as defined in TS 38.401 [2].

**secondary node:** as defined in TS 37.340 [9].

-------------------------------------------Next Change------------------------------------------

5.2.10.2 IAB Transport Migration function

This function allows the exchange of information between the F1-terminating IAB-donor-CU and the non-F1-terminating IAB-donor-CU of a boundary IAB-node, for the purpose of managing the migration of the boundary and descendant IAB-node traffic between the topologies managed by the two IAB-donor-CUs. This function also allows the exchange of information between the F1-terminating IAB-donor-CU and the RRC-terminating IAB-donor-CU of a mobile IAB-node, for the purpose of managing the migration of the mobile IAB-node traffic between the topologies managed by the two IAB-donor-CUs.

5.2.10.3 IAB Resource Coordination function

This function is used to exchange information between the F1-terminating IAB-donor-CU and the non-F1-terminating IAB-donor-CU of a boundary IAB-node in order to support resource multiplexing between the IAB-MT and the IAB-DU of the boundary IAB-node. This function is also used to exchange information between the F1-terminating IAB-donor-CU and the RRC-terminating IAB-donor-CU of a mobile IAB-node in order to support resource multiplexing between the IAB-MT and the IAB-DU of the mobile IAB-node.

-------------------------------------------Next Change------------------------------------------

6.2.10 IAB procedures

The IAB procedures are used to enable the transfer of F1/non-F1 traffic for IAB, to exchange information between the F1-terminating IAB-donor-CU and the non-F1-terminating IAB-donor-CU of a boundary IAB-node, to enable the delivery of F1-C traffic between the M-NG-RAN node and the S-NG-RAN node serving a dual-connected non-boundary IAB-node, to exchange resource multiplexing related information between the F1-terminating IAB-donor-CU and the non-F1-terminating IAB-donor-CU of a boundary IAB-node, to exchange information between the F1-terminating IAB-donor-CU and the RRC-terminating IAB-donor-CU of a mobile IAB-node, and to exchange resource multiplexing related information between the F1-terminating IAB-donor-CU and the RRC-terminating IAB-donor-CU of a mobile IAB-node:

- F1-C Traffic Transfer

- IAB Transport Migration Management

- IAB Transport Migration Modification

- IAB Resource Coordination

-------------------------------------------End of Change-------------------------------------------