3GPP TSG-RAN WG1 Meeting #104bis-e R1-210xxxx

e-Meeting, April 12th – 20th, 2021

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.213** | **CR** | **Draft** | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](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:*** | [Draft] Conditions for IAB-DU soft resource availability | | | | | | | | | |
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| ***Source to WG:*** | Moderator (AT&T), Qualcomm | | | | | | | | | |
| ***Source to TSG:*** | RAN WG1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_IAB-Core | | | | |  | ***Date:*** | | | 2021-04-19 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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 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)* | |
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| ***Reason for change:*** | | Clarify conditions in which an IAB-DU soft resource can be used, based on the follwing RAN1#104bis-e conclusion:  **Conclusion**  RAN1 observations on Rel-16 IAB:   * The RAN1#98: “The H/S/NA attributes for the per-cell DU resource configuration should take into account the associated MT carrier frequency(ies)” is not explicitly captured in either RAN1 or RAN3 specifications. * It is RAN1’s common understanding that the following interpretation of 38.213 captures the intended behavior in the usage of soft resources configured for a given IAB-DU cell in case the IAB-DU cell and IAB-MT CC are not on the same carrier frequency: | | | | | | | | |
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| ***Summary of change:*** | | Implement the TP from the above conclusion. | | | | | | | | |
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| ***Consequences if not approved:*** | | Two different interpretations are possible in regard to when an IAB-DU soft resource can be used, leading to different behaviors when IAB-MT and IAB-DU operate in different frequencies. | | | | | | | | |
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| ***Clauses affected:*** | | 14 | | | | | | | | |
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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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

# 14 Integrated access-backhaul operation

**<Unchanged parts omitted>**

With reference to slots of an IAB-DU cell, a symbol in a slot of an IAB-DU cell can be configured to be of hard, soft, or unavailable type. When a downlink, uplink, or flexible symbol is configured as hard, the IAB-DU cell can respectively transmit, receive, or either transmit or receive in the symbol.

When a downlink, uplink, or flexible symbol is configured as soft, the IAB-DU cell can respectively transmit, receive or either transmit or receive in the symbol only if

- the IAB-MT does not transmit or receive during the symbol of the IAB-DU cell, or

- the IAB-MT would transmit or receive during the symbol of the IAB-DU cell, and the transmission or reception during the symbol of the IAB-DU cell is not changed due to a use of the symbol by the IAB-DU, or

- the IAB-MT detects a DCI format 2\_5 with an AI index field value indicating the soft symbol as available