3GPP TSG-RAN WG3 #117-e R3-22xxxx

Online, Aug 17 – 25, 2022

Agenda Item: 9.2.5

Source: Qualcomm (Moderator)

Title: Summary of CB: #9\_Rel-17IAB

Document for: Discussion

# Introduction

This paper handled the following CB discussion:

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| **CB: # 9\_R17IAB****- Check the details of miscellaneous corrections on R17 IAB****- Provide CRs if agreeable**(Qualcomm - moderator)Summary of offline disc |

The following papers will be covered as assigned by the chair:

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| [R3-224209](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224209.zip) | LS on upper layers parameters for Rel-17 eIAB (RAN1) | LS in |
| [R3-224349](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224349.zip) | Correction on IAB Multiplexing info (Huawei, Lenovo, Ericsson, Samsung) | CR0980r, TS 38.473 v16.10.0, Rel-16, Cat. F |
| [R3-224350](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip) | Miscellaneous Correction on IAB (Huawei, Qualcomm, Ericsson) | CR0981r, TS 38.473 v17.1.0, Rel-17, Cat. F |
| [R3-224351](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224351.zip) | Miscellaneous Correction on IAB (Huawei, Qualcomm, Lenovo, Fujitsu, Ericsson ) | CR0860r, TS 38.423 v17.1.0, Rel-17, Cat. F |
| [R3-224352](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224352.zip) | Correction on protocol stack for IAB (Huawei, Qualcomm, Lenovo, Fujitsu, Ericsson ) | CR0242r, TS 38.401 v17.1.1, Rel-17, Cat. F |
| [R3-224500](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224500.zip) | (CR TS 38.423) Correction to RB Set Definition (Ericsson) | CR0870r, TS 38.423 v17.1.0, Rel-17, Cat. F |
| [R3-224501](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224501.zip) | (CR TS 38.473) Correction to RB Set Definition (Ericsson) | CR0987r, TS 38.473 v17.1.0, Rel-17, Cat. F |
| [R3-224503](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224503.zip) | CR for 38.473 on Rel-17 IAB enhancements to topology adapatation (Qualcomm Inc.) | CR0246r, TS 38.401 v17.1.1, Rel-17, Cat. F |
| [R3-224703](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224703.zip) | Corrections on IAB inter-CU topology adaptation (Fujitsu) | CR0250r, TS 38.401 v17.1.1, Rel-17, Cat. F |
| [R3-224715](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224715.zip) | Miscellaneous corrections on IAB in TS 38.473 (ZTE) | CR1008r, TS 38.473 v17.1.0, Rel-17, Cat. F |
| [R3-224735](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224735.zip) | Correction to 38.420 for IAB (CATT) | CR0032r, TS 38.420 v17.1.0, Rel-17, Cat. F |

**Phase I**：Converge on the CRs. Please give your feedback before Thursday, 18th August, 2022, 23:59 UTC.

**Phase II**：If further discussion is needed.

# For the Chairman’s Notes

**[To be updated].**

# Discussion-Phase I

## LS from RAN1: R3-224209

LS from RAN1:

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| [R3-224209](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224209.zip) | LS on upper layers parameters for Rel-17 eIAB (RAN1) | LS in |

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| Title: LS on upper layers parameters for Rel-17 eIABResponse to: -Release: Rel-17Work Item: NR\_IAB\_enh-CoreSource: RAN WG1To: RAN WG2, RAN WG3Cc:1. **Overall Description:**

RAN1 has made the following agreements in RAN1#109e related to RRC parameters for Rel-17 eIAB:

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| AgreementAn IAB node can be configured with two availabilityCombinations tables, one for TDM and one for FDM**Agreement**If an IAB node is configured with two availabilityCombinations tables, both shared and separate AI index fields are supported by introducing positioninDCI-AI-rel17. |

In addition, RAN1 has made the following agreements in RAN1#109e related to F1AP parameters for Rel-17 eIAB:

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| **Agreement**If the RB sets of a Rel-17 IAB-DU H/S/NA resource configuration do not cover the entire carrier bandwidth: The remaining RBs not part of an RB set configuration are considered as included in the last RB set. |

**2. Actions:****To RAN WG2 and RAN WG3****ACTION:** RAN1 would like to kindly ask RAN2 and RAN3 to consider the design of the corresponding higher-layer parameters in Rel-17.  |

The first two agreements affect RRC and need to be handled by RAN2. The third agreement has been addressed by CRs R3-224350, R3-224351, R3-224500, and R3-224501 and will be discussed further below.

## 3.2 Rel-16 CR to 38.473 on IAB Multiplexing info

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| [R3-224349](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224349.zip) | Correction on IAB Multiplexing info (Huawei, Lenovo, Ericsson, Samsung) | CR0980r, TS 38.473 v16.10.0, Rel-16, Cat. F |
| ***Reason for change:*** | * In section 9.3.1.108, the order of the *DU\_RX/MT\_TX* IE and *DU\_TX/MT\_RX* IE in the tabular is not align with ASN.1 part.
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| ***Summary of change:*** | 1. In section 9.3.1.108, change the order of the *DU\_RX/MT\_TX* IE and *DU\_TX/MT\_RX* IE

**Impact analysis**Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release).This CR has no impact under functional point of view. The impact can be considered isolated because the change affects only the IAB related procedure.The changes are backward compatible. |

**Q2: Do you support this CR to 38.473 proposed by** [R3-224349](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224349.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | Yes |  |
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## 3.3 Rel-17 Misc CRs to 38.473 on IAB

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| [R3-224350](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip) | Miscellaneous Correction on IAB (Huawei, Qualcomm, Ericsson) | CR0981r, TS 38.473 v17.1.0, Rel-17, Cat. F |

The change number 8 below is also captured in:

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| [R3-224501](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224501.zip) | (CR TS 38.473) Correction to RB Set Definition (Ericsson) | CR0987r, TS 38.473 v17.1.0, Rel-17, Cat. F |

R3-224501 will therefore be discussed together with R3-224350.

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| ***Reason for change:*** | * RAN3-114bis has the following working assumption: “WA: Upon migration/HO failure case, the buffered RRC message is still transferred to child node”. And RAN2-117e agreed that “RAN2 does not have specific concerns about RAN3’s WA that upon migration/HO failure, the buffered RRC message is still transferred to the child node.” After HO failure, the migrating IAB-MT will perform RLF recovery by initiating RRCReestablishment,
* If the recovery fails, the migrating IAB-node will send BH RLF notification to its child node, and then the child node will perform RLF recovery. In this case, it doesn’t matter whether the buffered RRCReconfiguration message is released to the child node or not.
* If the recovery is successful, the migrating IAB-node should release the buffered RRCReconfiguration message to the child node. This is to let the child node perform reconfiguration of IP address and default BAP configuration in the target path if the migrating IAB-node connects to the target partent node after successful recovery, or to avoid the PDCP SN gap with the subsequent RRCReconfiguration if the migrating IAB-node connects to a different target parent node.

Therefore, the condition that the migrating IAB-node has successfully recovered after handover failure should also be captured in the UE context modification procedure.* The sentence “for each parent-node cell serving an IAB-node indicated by the *gNB-CU UE F1AP ID* IE and the *gNB-DU UE F1AP ID* IE” in the paragraph of about the *Neighbour-Node Cells List* is confusing. It reads like the gNB-DU will only store the peer parent node information. However, other neighbour cells which are not the peer parent node should also be take into account for the interference mitigation.
* The Buffer size threshold for determining the congestion in clause 9.2.9.1 is in bytes, it does not match the unit for available buffer size defined in BAP specification TS38.340.
* In the neighboring-node cells list IE, the information of peer parent node’s cell should cover both intra-CU DC and inter-CU DC scenario, as described in RAN1 LS (R3-222799), but the semantics description for the peer-parent node indicator only mention the “boundary IAB-node”, so the intra-CU dual connectivity case is not included.
* In section 9.2.9.3, the constant maxnoofServingCells is used in *Serving Cells List* IE but not defied in the range bound table.
* In clause 9.3.1.107, the RB set index is not extendable in the table, not aligh with the ASN.1 part.
* RAN1 send LS R1-2205644, to notify the new agreements in RAN1 #109e : If the RB sets of a Rel-17 IAB-DU H/S/NA resource configuration do not cover the entire carrier bandwidth: The remaining RBs not part of an RB set configuration are considered as included in the last RB set. This agreement needs to be captured in the RB set configuration.
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| ***Summary of change:*** | 1. In section 8.3.4.2, add “migrating IAB-MT has successfully performed RLF recovery after handover failure” as new condition for the gNB-DU to release the buffered RRCReconfiguration towards the child node. And made some editorial changes to the other conditions.
2. In clause 8.10.2.2, remove the confusing sentence “for each parent-node cell serving an IAB-node indicated by the *gNB-CU UE F1AP ID* IE and the *gNB-DU UE F1AP ID* IE”. And clarify how to interpret the UE F1AP IDs as well as the Peer Parent-Node Indicator which is also optional IE in the message.
3. Change the bytes to kilobytes in the semantics description for the Buffer Size Threshold in clause 9.2.9.1.
4. In section 9.2.9.3, change the “boundary IAB-node” as “dual connected IAB-node” in the semantics description of the “Peer Parent-Node Indicator”.
5. In section 9.2.9.3, add the Maxnoofservingcells in the range bound table.
6. In clause 9.3.1.107, change the RB set index to be extendable.
7. In 9.3.1.230, capture the following agreements in the semantics description of RB set size IE: If the RB sets of a Rel-17 IAB-DU H/S/NA resource configuration do not cover the entire carrier bandwidth: The remaining RBs not part of an RB set configuration are considered as included in the last RB set. This agreements needs to be captured in the RB set configuration.
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**Q3: Do you support the CRs to 38.473 proposed by** [R3-224350](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | Yes |  |
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## 3.4 Rel-17 Misc CRs to 38.423 on IAB

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| [R3-224351](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224351.zip) | Miscellaneous Correction on IAB (Huawei, Qualcomm, Lenovo, Fujitsu, Ericsson ) | CR0860r, TS 38.423 v17.1.0, Rel-17, Cat. F |

The change number 6 below is also captured in:

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| [R3-224500](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224500.zip) | (CR TS 38.423) Correction to RB Set Definition (Ericsson) | CR0870r, TS 38.423 v17.1.0, Rel-17, Cat. F |

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| ***Reason for change:*** | * In section 8.5.4.2, “The non-F1-terminating/F1-terminating IAB-donor-CU may respond with the IAB RESOURCE COORDINATION RESPONSE message to the F1-terminating/non-F1-terminating IAB-donor-CU”. The “may respond” is not suitable since the procedure is a class 1 procedure and the response message is necessary.
* Inconsistence of terminology : the term “F1-terminating IAB-donor-CU” and “non-F1-terminating IAB-donor-CU” are use in some places, but in the procedure description and the figures of the procedures, we use “F1-termianting IAB-donor” and “non-F1 termianting IAB-donor” instead. And the “IAB-donor” is more appropriate than the “IAB-donor-CU” in this XnAP specification.
* In section 9.1.4.3, the IE “cause” refers to a wrong clause.
* In section 9.2.2.83, the IE name “Ingress BH RLC CH” should be “Ingress BH RLC CH ID”
* In section 9.2.2.95, the value range for the IE “RB Set Index” is start from 1, not align with the semantic description and the F1AP specification.
* RAN1 send LS R1-2205644, to notify the new agreements in RAN1 #109e : If the RB sets of a Rel-17 IAB-DU H/S/NA resource configuration do not cover the entire carrier bandwidth: The remaining RBs not part of an RB set configuration are considered as included in the last RB set. This agreements needs to be captured in the RB set configuration.
* In clause 9.2.2.97, the following constant: maxnoofRBsetsPerCell1, maxnoofPhysicalResourceBlocks, maxnoofPhysicalResourceBlocks1 are not used in the IE tabular, so the three constants are not necessary in the range bound table.
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| ***Summary of change:*** | 1. In section 8.5.4.2, use “shall” instead of “may” in the sentence “The non-F1-terminating/F1-terminating IAB-donor-CU may respond with the IAB RESOURCE COORDINATION RESPONSE message to the F1-terminating/non-F1-terminating IAB-donor-CU”.
2. Replace the “IAB-donor-CU” by “IAB-donor” in the term “F1-terminating IAB-donor-CU” and “non-F1-terminating IAB-donor-CU” across the whole specification.
3. In section 9.1.4.3, change the IE “cause” reference to 9.2.3.2.
4. In section 9.2.2.83, change the IE name “Ingress BH RLC CH” to “Ingress BH RLC CH ID”.
5. In section 9.2.2.95, the value range for the IE “RB Set Index” in the IE type and reference part is changed as INTEGER (0.. *maxnoofRBsetsPerCell1,…*), to align with the semantic description and the F1AP specification. And update the ASN.1 part in 9.3.5 accordingly.
6. Capture the following agreements in the semantics description of RB set size IE: If the RB sets of a Rel-17 IAB-DU H/S/NA resource configuration do not cover the entire carrier bandwidth: The remaining RBs not part of an RB set configuration are considered as included in the last RB set. This agreements needs to be captured in the RB set configuration.
7. In clause 9.2.2.97, remove following constants from the range bound table: maxnoofRBsetsPerCell1, maxnoofPhysicalResourceBlocks, maxnoofPhysicalResourceBlocks1.

**Impact analysis**Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release).This CR has no impact under functional point of view. The impact can be considered isolated because the change affects only the IAB related procedure.The changes are backward compatible. |

**Q4: Do you support the CRs to 38.423 proposed by** [R3-224351](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | Yes |  |
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## 3.5 Rel-17 CR to 38.401 on IAB protocol stack

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| [R3-224352](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224352.zip) | Correction on protocol stack for IAB (Huawei, Qualcomm, Lenovo, Fujitsu, Ericsson ) | CR0242r, TS 38.401 v17.1.1, Rel-17, Cat. F |

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| ***Reason for change:*** | 1. In section 6.1.4, for the protocol stack related to CP-UP separation scenario 1 shown in Fig. 6.1.4-4, the RRC layer should be terminated at the MgNB, since the F1-C related message is transmitted from MgNB to SgNB via the “F1-C traffic transfer” procedure.
2. In Fig. 6.1.4-5, there is typo (redundant wording “RRC”) for the NR RRC layer shown in the IAB-donor-CU-CP side.
3. In section 8.12.1, for the Note in which the NR-DC is established before the F1-C setup, if MN decides that the SN is the F1-terminating donor, it notifies the SN via the SN addition request, rather than in Phase 2.1 and 2.2 given in the bracket, which is confusing and unnecessary.
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| ***Summary of change:*** | 1. Correct the protocol stack in Fig. 6.1.4-4.
2. Remove the redundant “RRC” from the IAB-donor-CU-CP in Fig. 6.1.4-5
3. Delete the content “(Phase 2.1 and 2.2)” in section 8.12.1.

**Impact analysis**Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release).This CR has no impact under functional point of view. The impact can be considered isolated because the change affects only the IAB related procedure.The changes are backward compatible. |

**Q5: Do you support the CRs to 38.401 proposed by** [R3-224352](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | Yes |  |
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## 3.6 First Rel-17 CR to 38.401 on IAB topology adaptation

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| [R3-224503](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224503.zip) | CR for 38.401 on Rel-17 IAB enhancements to topology adapatation (Qualcomm Inc.) | CR0246r, TS 38.401 v17.1.1, Rel-17, Cat. F |

This CR includes the issue captured by the chair in last RAN3 meeting:

*Updates to stage2 for Alt1 to avoid the packet discarding due to no matched routing entries during parallel TNL migration of the descendant nodes in IAB intra-CU topology adaptation? LS to RAN2?*

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| ***Reason for change:*** | **1:** For intra-donor topology adaptation in section 8.2.3, the present text specified:If needed, the IAB-donor-CU configures BH RLC channels, BAP-sublayer routing entries on the target path for the descendant nodes and the BH RLC channel mappings on the descendant nodes in the same manner as described for the migrating IAB-node in step 11. The yellow highlighted text is technically correct, but it omits that the BH RLC channel mappings may also have to be updated on the migrating IAb-node. **2:** For intra-donor topology adaptation in section 8.2.3, RAN3#116 identified the following issue:*Updates to stage2 for Alt1 to avoid the packet discarding due to no matched routing entries during parallel TNL migration of the descendant nodes in IAB intra-CU topology adaptation? LS to RAN2*The present text already specified that for parrellel TNL migration of the descendent nodes, the RRCReconfiguration messages with the new TNL address(es) and the new default BAP configuration needs to be sent to the descendent node while the migrating IAB-MT is still connected with the source parent node. It misses that the BAP-sublayer routing entries on the migrating IAB-node and the descendent nodes also need to be reconfigured while the migrating IAB-MT is still connected with source parent node. **3.** For inter-donor topology adaptation of the descendent nodes in section 8.17.3.2, the following section:The target IAB-donor-CU may trigger the modification of the L2 transport of the offloaded traffic in the target IAB-donor-CU’s topology. The target IAB-donor-CU may further provide updated TNL address information for the descendant IAB-node to the source IAB-donor-CU.omits the to include the name of the XnAP message used for this trigger. It further omits that based on this message, the source IAB-donor-CU should reconfigure the UL BH mappings on the descendent nodes, the routing entries and BH RLC channel mappings on the migrating node and the descendent nodes, and the BAP header rewriting entries on the migrating node, and acknowledge the modification via the IAB TRANSPORT MIGRATION MODIFICATION RESPONSE message.  |
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| ***Summary of change:*** | **Change 1**: For intra-donor topology adaptation in section 8.2.3, the BH RLC channel mapping reconfiguration is included with the BAP-sublayer reouting entreis reconfiguration on the target path for the descendent nodes. This inlcudes all nodes on the path, i.e., also the migrating IAB-node.**Change 2**: For intra-donor topology adaptation in section 8.2.3, it was added that the configuration of BAP-sublayer routing entries on the migrating IAB-node and the descendent nodes should also occur while the migrating IAb-MT is still connected with the source parent node.**Change 3:** For inter-donor topology adaptation of the descendent nodes in section 8.17.3.2, the XnAP message name was added. It was further added that based on this message, the source IAB-donor-CU should reconfigure the UL BH mappings on the descendent nodes, the routing entries and BH RLC channel mappings on the migrating node and the descendent nodes, and the BAP header rewriting entries on the migrating node, and acknowledge the modification via the IAB TRANSPORT MIGRATION MODIFICATION RESPONSE message. |

**Q6: Do you support the CRs to 38.401 proposed by** [R3-224503](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | See comment | Change 1 is ok.Change 2: we prefer to use “may” instead of “should” since the pre-configuration is not mandatory.Change 3: Even if the target donor changes the non-F1 terminating BH information, the UL BH mapping, routing entries, and BH RLC CH mappings on the descendant node may not need change. But the current change 3 seems mandatory the reconfiguration at the descendant nodes, but this is not appropriate. Suggest to remove the content related to descendant nodes in the new added sentences, or change the wording to make the reconfiguration to descendant nodes optional.  |
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## 3.7 Second Rel-17 CR to 38.401 on IAB topology adaptation

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| [R3-224703](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224703.zip) | Corrections on IAB inter-CU topology adaptation (Fujitsu) | CR0250r, TS 38.401 v17.1.1, Rel-17, Cat. F |

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| ***Reason for change:*** | In inter-CU topology adaptation procedure with descendant node, BH RLC channels, BAP-layer route entries shoud be configured on the target path for the descendant nodes and the BH RLC channel mappings on the descendant nodes. This is needed for inter-CU topology adaptation, inter-CU BH RLF recovery, and inter-CU topology redundancy with descendant node. To avoid the packet discarding due to no matched routing entries during parallel TNL migration of the descendant nodes These configurations may be performed at an earlier stage, e.g., before IAB-donor-CU sending the RRCReconfiguration message to parent node of each descendant node.The default UL mapping for descendant node should also be provided in RRCReconfiguration. |
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| ***Summary of change:*** | 1. In step 6, add a description that the default UL mapping for descendant node my be provided via RRCReconfiguration.
2. Add a procedural step 10 for the inter-CU topology adaptation with descendant node that BH RLC channels, BAP-layer route entries shoud be configured on the target path for the descendant nodes and the BH RLC channel mappings on the descendant nodes.
3. These configurations may be performed at an earlier stage, e.g., before IAB-donor-CU sending the RRCReconfiguration message to parent node of each descendant node.
4. Update Figure 8.17.3.2-1 to reflect the added step 10.

**Impact Analysis**Impacted 5G architecture options:SA, NR-DC Impacted functionality:NR eIAB Inter-operability:1. If the IAB is implemented according to this CR but the network is not, there is no inter-operability issue foreseen.
2. If the network is implemented according to this CR but the IAB is not, there is no inter-operability issue foreseen.
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**Q7: Do you support the CR to 38.401 proposed by** [R3-224703](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes | This change is absolutely necessary. A little more on the motivation: It may not be necessary to change UL mapping and routing on the target path for descendent node traffic if the BAP routing ID contained in the old DN UL mappings remain unchanged. Keeping them unchanged implies that the BAP address in this BAP routing ID of the old UL mappings, which is the BAP address of the old donor-DU, become the “pseudo” BAP address for the new donor-DU. Choosing the BAP address of the old donor-DU as the “pseudo” BAP address for the new donor-DU **is not possible** if the DN is dual-connected and has another path to the old donor-DU. In this case, it is configured with IP addresses from the old and the new donor-DUs, and the BAP addresses for these two sets of IP addresses must be different, so that the DN can select the UL mapping for an UL packet in compliance with source IP address of that packet.  |
| Huawei | See comment | Change in step 6 is OK.For change in step 10, is the parallel TNL migration also supported for the inter-donor migration case? And the BH RLC channel, routing entry and mapping may not need to be updated for descendant nodes since the link for the descendant nodes does not changed. |
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## 3.8 Rel-17 Misc CR to 38.473 on IAB

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| [R3-224715](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224715.zip) | Miscellaneous corrections on IAB in TS 38.473 (ZTE) | CR1008r, TS 38.473 v17.1.0, Rel-17, Cat. F |

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| ***Reason for change:*** | 1. In current specification, the description of Number of RB Sets IE in RB Set Configuration is “Number of configured RB sets. The RB sets are contiguous and non-overlapping. The start RB index of the first RB set is the lowest index of RB of the IAB-DU cell.”. However, the meaning of “the lowest index of RB of the IAB-DU cell” is not clear. As we know, there may be multiple carriers configured in one IAB-DU cell associated with different SCSs. So it is not clear which carrier should be used to determine “the lowest index of RB of the IAB-DU cell”. As captured in TS 38.473, Subcarrier Spacing IE is contained in the RB Set Configuration to indicate the Subcarrier spacing used as reference for the RB set configuration. So “the lowest index of RB of the IAB-DU cell” should be the lowest index of RB of the carrier corresponding to the *Subcarrier Spacing* IE.
2. During RAN3#116e meeting, the trigger condition for the descendant IAB node to transfer the buffered RRC message was discussed. Two alternatives were discussed, i.e. Alt1 is that the routing entries for the target path at descendant IAB-node is pre-configured from IAB-donor-CU; Alt 2 is that the default BH RLC CH is used if no routing entry exists for the received packets. There was no agreement on this issue. And it was captured in the meeting report that for next meeting, companies are encouraged to provide updates to stage2 for Alt1. It implies that we could try to agree to Alt1. So the trigger condition for the descendant IAB node to transfer the buffered RRC message needs to be updated to add one condition that it has one or more routing entries for the target path.
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| ***Summary of change:*** | 1. Clarify that “the lowest index of RB of the IAB-DU cell” in the description of *Number of RB Sets* IE should be the lowest index of RB of the carrier indicated by the *Subcarrier Spacing* IE.
2. The trigger condition for the descendant IAB node to transfer the buffered RRC message needs to be updated to add one condition that it has one or more routing entries for the target path.

**Impact analysis**Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release).This CR has impact under functional point of view. The impact can be considered isolated because the change affects only the IAB related procedure. |

**Q8: Do you support the CR to 38.473 proposed by** [R3-224715](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | See comment | The first change on the trigger condition of releasing buffered RRCReconfiguration to child node is incorrect and not needed, how can the descendant node know it has routing entry for "target path" or “source path”? The stage 2 change in 4503 is enough, as indicated in minutes in last meeting. The second change seems not needed also, the current text is clear. |
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## 3.9 Rel-17 CR to 38.420 for IAB

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| [R3-224735](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224735.zip) | Correction to 38.420 for IAB (CATT) | CR0032r, TS 38.420 v17.1.0, Rel-17, Cat. F |

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| ***Reason for change:*** | The below IAB procedures are used to enable the transfer of F1-C, F1-U and non-F1 traffic for IAB.- IAB Transport Migration Management- IAB Transport Migration ModificationThe current spec. includes F1-C traffic only. |
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| ***Summary of change:*** | Change “F1-C traffic” to “F1/non-F1 traffic” for IAB procedure.Impact Analysis:This CR has an isolated impact towards the previous version of the specification (same release).This CR only has an impact on the IAB function. |

**Q9: Do you support the CR to 38.420 proposed by** [R3-224735](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_117-e%5CDocs%5CR3-224350.zip)**?**

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| **Company** | **Yes/No** | **Comments if any** |
| Qualcomm | Yes |  |
| Huawei | Yes |  |
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# Discussion-Phase II

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