3GPP TSG-RAN WG3 #116-e R3-223708

Online, 09th -19th May, 2022

Agenda Item: 9.1.2.1

Source: Huawei (moderator)

Title: Summary of CB: # IAB\_04\_CR38.473

Document for: Approval

# Introduction

This paper is for the following offline discussion:

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| **CB: # IAB\_04\_CR38.473****- Agree on needed corrections****- Converge on Single CR**(HW - moderator)Summary of offline disc [R3-223708](Inbox%5CR3-223708.zip) |

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

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| [R3-223253](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223253.zip) | Corrections for IAB (F1AP) (Nokia, Nokia Shanghai Bell) | CR0891r, TS 38.473 v17.0.0, Rel-17, Cat. F |
| [R3-223296](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223296.zip) | Corrections on IAB in TS 38.473 (ZTE) | CR0898r, TS 38.473 v17.0.0, Rel-17, Cat. F |
| [R3-223387](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223387.zip) | Correction for IAB inter-donor DU re-routing and resource multiplexing (Huawei, Lenovo) | CR0910r, TS 38.473 v17.0.0, Rel-17, Cat. F |
| [R3-223222](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223222.zip) | BAP header rewriting list configuration in NR eIAB (Fujitsu) | CR0881r, TS 38.473 v17.0.0, Rel-17, Cat. F |
| [R3-223120](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223120.zip) | (CR TS 38.473): IAB Rel-17 Corrections (Ericsson) | CR0869r, TS 38.473 v17.0.0, Rel-17, Cat. FMove to 9.1.2.1 |
| [R3-223299](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223299.zip) | ASN.1 corrections on IAB in TS 38.473 (ZTE) | CR0899r, TS 38.473 v17.0.0, Rel-17, Cat. FMove to 9.1.2.1 |
| [R3-223388](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_116-e%5CDocs%5CR3-223388.zip) | Correction for IAB resource coordination (Huawei) | CR0911r, TS 38.473 v17.0.0, Rel-17, Cat. FMove to 9.1.2.1 |
| [R3-223675](Inbox%5CR3-223675.zip) | CR to 38.473 for Rel-17 IAB (Qualcomm Incorporated) | CR0962r, TS 38.473 v17.0.0, Rel-17, Cat. FLate contribution |

The moderator merged the changes which maybe easy to be agreed from these papers to one CR, which has also been uploaded in the same folder for further checking. In addition, some changes which may need further discussion, are listed in the section 3.

Please note that the late contribution R3-223675 has also been contained in this discussion.

**Phase I**：Converge on the CRs. Please give your feedback before Wednesday, 11th May, 2022, 12:00 UTC.

**Phase II**：if any need to be further discussed.

# For the Chairman’s Notes

**[To be updated].**

# Discussion-Phase I

## Remaining issues to be discussed

### Issue 1. The condition for a descendant IAB-node of the migrating IAB-node to send the buffered RRCReconfiguration to the child IAB-node.

In [R3-223253], the following change is proposed, for the descendant IAB-node for the concurrent TNL migration.

If the gNB-DU belongs to a descendant node of the migrating IAB-node, that the collocated IAB-MT has received an *RRCReconfiguration* message including the intra-donor migration configurations, e.g., new TNL address(es) and the new default UL BAP routing ID, and the IAB-node has one or more routing entries for the target path.

Since similar issue has been covered by the CB: # IAB\_02\_CR38.401, we can discuss the condition for a descendant IAB-node there, and capture the change if necessary after we have conclusion in that CB. Consequently, there is no question about this issue in this CB.

###  Issue 2: RB set Configuration.

Several papers propose change to the RB set configuration in 9.3.1.230. [R3-223387] suggest to change “RB set” to “RB sets” in the RB set List IE since the terminology should be RB sets based on RAN1 discussion and agreement.

[R3-223120] propose to remove the *RB set list* IE and just add “The value is at least the number of PRBs corresponding to the number of configured IAB-MT’s PRBs” to the semantics description of the *RB Set Size* IE, while [R3-223296] and [R3-223675] propose to remove the *RB set list* IE and add a new *Number of RB Sets* IE in the 9.3.1.230, the change is pasted below:

9.3.1.230 RB Set Configuration

This IE contains the RB Set Configuration. The IE is only applicable if the gNB-DU is an IAB-DU.

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| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** |
| Subcarrier Spacing | M |  | ENUMERATED (kHz15, kHz30, kHz60, kHz120, kHz240, spare3, spare2, spare1, …) | Subcarrier spacing used as reference for the RB set configuration. |
| RB Set Size | M |  | ENUMERATED (rb2, rb4, rb8, rb16, rb32, rb64) | Number of PRBs in each RB set. |
| Number of RB Sets | M |  | INTEGER(1.. *maxnoofRBsetsPerCell)* | 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. |
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**Q1-1: Do you agree that the terminology “RB set” should be “RB sets” in the *RB set List* IE?**

**Q1-2: Do you agree that the *RB set List* IE be replaced by the “number of RB sets”?**

**Q1-3: Do you agree to add “The value is at least the number of PRBs corresponding to the number of configured IAB-MT’s PRBs” to the semantics description of the *RB Set Size* IE?**

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| **Company** | **Yes/No** | **Reasons/Comments** |
| Huawei | **Q1-1: Yes****Q1-2: No****Q1-3: No** | **Q1-1:** Yes, this reflects the real terminology, can avoid misunderstanding.**Q1-2:** Such change only make sense in the case that each RB sets in a cell has common size, but there is no such agreement from RAN1’s LS (R3-222799), so the change is not correct. **Q1-3**: The added sentence is not necessary and somehow confusing. Since the LS R3-222799 stated that “List of values for N = {2, 4, 8, 16, 32, 64}” (agreed in RAN1 106-e) and the current version is clear enough. [R3-223120] which propose the change, refers to the RAN1 105-e meeting agreement “*N is at least the # PRBs that are corresponding to the MT’s # PRBs of an RBG)*”, according to my understanding, this agreement is just for discussing the value of N. Now that the value of N has been agreed in RAN1 106-e, this agreement is outdated. |
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###  Issue 3: terminology

[R3-223675] proposed to use “Non-F1-Terminating IAB-donor’s Topology Indicator” instead of “Non-F1-Terminating Topology Indicator”, and will result in several changes as below.

9.2.9.1 IAB messages – BAP Mapping configuration:

* Changed name of “Non-F1-Terminating Topology Indicator” IE to “Non-F1-Terminating IAB-donor’s Topology Indicator” and the associated semantics description inside the “BAP MAPPING CONFIGURATION” IE.

9.3.1.98 BAP layer – BH RLC channel mapping Information List

* Changed names of “Ingress Non-F1-terminating Topology Indicator” IE and “Egress Non-F1-terminating Topology Indicator” IE to “Ingress Non-F1-terminating IAB-donor’s Topology Indicator” IE and “Egress Non-F1-terminating IAB-donor’s Topology Indicator” IE respectively and the associated semantics description inside the “BAP layer BH RLC channel mapping Information List” IE.

 9.3.1.114 BH Information

* Changed name of “Non-F1-Terminating Topology Indicator” IE to “Egress Non-F1-Terminating IAB-donor’s Topology Indicator” and the associated semantics description inside the “BH Information” IE.

**Q2: Do you agree to change “Non-F1-Terminating Topology Indicator” to be “Non-F1-Terminating IAB-donor’s Topology Indicator” for several clauses in the F1AP spec?**

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| **Company** | **Yes/No** | **comments if any** |
| Huawei | No | Not necessary, the change is not essential, the current terminology is simpler, and clear enough. |
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