**3GPP TSG-RAN WG2 Meeting #109e-bis R2-20xxxxx**

**Electronic meeting, April 20 – April 30**

**Agenda item:** 6.1.1

**Source:** Qualcomm Incorporated (Rapporteur)

**Title:** [AT109bis-e][018][IAB] IAB terminology + other issues

**Document for:** Discussion

# Introduction

This document handles aspects related to IAB-terminology/notation, use of Rel-16 UE features for IAB-MT, and other issues as part of offline email discussion:

* [AT109bis-e][018][IAB] Stage-2 (Qualcomm, Huawei)

Scope: Treat Stage-2: Issues, corrections and CRs (add CRs to x.300 if needed).

Specifically: [R2-2003014](file:///D:\\Documents\\3GPP\\tsg_ran\\WG2\\TSGR2_109bis-e\\Docs\\R2-2003014.zip" \o "D:Documents3GPPtsg_ranWG2TSGR2_109bis-eDocsR2-2003014.zip), [R2-2002728](file:///D:\\Documents\\3GPP\\tsg_ran\\WG2\\TSGR2_109bis-e\\Docs\\R2-2002728.zip" \o "D:Documents3GPPtsg_ranWG2TSGR2_109bis-eDocsR2-2002728.zip), [R2-2003178](file:///D:\\Documents\\3GPP\\tsg_ran\\WG2\\TSGR2_109bis-e\\Docs\\R2-2003178.zip" \o "D:Documents3GPPtsg_ranWG2TSGR2_109bis-eDocsR2-2003178.zip)

Part 1: Treat meeting input and comments.

Deadline: April 24 0700 UTC

Part 2: Update of CRs, e.g. to include agreements this meeting

The topics should be addressed during Part 1 of the offline. The deadline therefore is:

Deadline: April 24 0700 UTC

# Discussion

2.1 IAB terminology/notation changes

The discussion is based on R2-2002728. This paper proposes a few modifications to the IAB terminology and notation based on discussions in RAN3 after last meeting. The following captures the modifications on IAB terminology and notation:

* In running CR 38300, the *IAB-donor* is defined as a gNB that provides network access to UEs via a network of backhaul and access links.
  + There is **no** *IAB-donor gNB* or *IAB-donor-gNB*.
  + IAB-donor-DU and IAB-donor-CU are hyphenated in the same manner as the gNB-CU and gNB-DU.
* The IAB-node holds gNB-DU functionality with IAB-specific enhancements, referred to as *IAB-DU*.
  + There is **no** *IAB-node-DU* since this might imply that there would also be an *IAB-node-CU*.
  + The IAB-DU of a specific IAB-node, e.g., IAB-node 1, can be referred to as IAB-node-1’s IAB-DU, or IAB-DU 1.
* The IAB-node holds UE functionality with IAB-specific enhancements, referred to as *IAB-MT*.
  + There is **no** *IAB-node-MT* (since this might imply that there would also be an IAB-node-DU).
  + The IAB-MT of a specific IAB-node, e.g., IAB-node 1, can be referred to as IAB-node-1’s IAB-MT, or IAB-MT 1.
* The parent-node IAB-DU and child-node IAB-MT may be referred to as parent IAB-DU and child IAB-MT, respectively.
* Hyphenation follows commonly known rules.

**Proposal 2-1: RAN2 to agree on the above IAB terminology and notation.**

**Q: Do you agree with this proposal?**

|  |  |  |
| --- | --- | --- |
| Company | Agree with proposal | Comment |
| LG | Yes |  |
| Verizon | Yes | It would be good to include definitions for IAB-donor-DU and IAB-donor-CU in the Definitions section. |
| Huawei | Yes | We’d better formulate the proposal in a formal way, e.g.  **Proposal: IAB specifications will use the terminology and notation: IAB-donor-DU, IAB-donor-CU, IAB-donor, IAB-DU, IAB-MT, Child IAB-MT, Parent IAB-DU, Parent IAB-donor-DU.** |
| Apple | Yes | Would be good to include parent-node and child-node definitions as well into this terminology |
| CATT | Yes |  |
| NEC | Yes |  |
| ZTE | Yes |  |

2.2 Use of Rel-16 UE features for IAB-MT

We are spending an increasing amount of time on discussing if individual Rel-16 UE features can be used by the IAB-MT. While a Rel-16 MT feature and capability discussion still has to happen, we could already move things forward via the following proposal:

**Proposal 2-2: All Rel-16 UE features can at least optionally be used by the IAB-MT.**

**Q: Do you agree with this proposal?**

|  |  |  |
| --- | --- | --- |
| Company | Agree with proposal | Comment |
| LG | Yes | We assume that all Rel-16 UE features mean Rel-16 features developed by other Rel-16 WI. For Rel-16 MT feature, this should be discussed separately. |
| Verizon | Yes | Same view as LG above. |
| Huawei | No | There are so many WIs which are unrelated to IAB, e.g. IioT, 2-step RA, NR-U. If we want to discuss this proposal, we need to check and discuss case by case: whether it is beneficial for IAB-MT, **whether it can be supported without additional spec impacts**. One example can be the NPN feature, we already see some difficulty and more standard efforts for IAB supporting in NPN deployment. This is just one of all those 10+ Wis.  **We are not OK to just agree the proposal without any real discussion on each WI features.** In the very late stage, it is difficult to have a comprehensive analyses.  Instead, we can first try to agree if some of those Wis are needed and easily supported by IAB-MT. Some examples can be the CHO, DAPS, etc., which somehow are related to IAB R17 features. It is helpful to have a clear understanding on if the R16 IAB can those or to be discussed in R17. |
| Apple | Yes | Same view as LG above. |
| CATT | Can postpone? | The UE feature discussions for R16 are on-going in WGs and Wis. We’d prefer to postpone a bit this proposal until the whole picture is clear. If for some feature there is urgency to decide we could check case by case. |
| NEC | Yes | Same view as LG above. |
| ZTE | Not for now | It is suggested to have a comprehensive analysis of each Rel-16 UE feature before we draw the conclusion. |

# Conclusion

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