**3GPP TSG RAN WG1 #102-e R1-20xxxxx**

**e-Meeting, August 17th – 28th, 2020**

**Agenda Item:** **7.2.3**

**Source: Moderator (AT&T)**

**Title: Summary of [102-e-NR-IAB-02]**

**Document for:** **Discussion/Approval**

# Introduction

This contribution provides a summary of the following email discussion:

[102-e-NR-IAB-02] Identify the minimum specification text required for the following RAN3-defined signaling parameters to TS 38.213 – Thomas (AT&T)

* Rename the parameter “IAB-DU-Resource-Configuration-TDD-Config” in 38.213 to “gNB-DU Cell Resource Configuration-TDD”.
* For paired spectrum operation add: “gNB-DU Cell Resource Configuration-FDD-DL and gNB-DU Cell Resource Configuration-FDD-UL”.
* Discussion and agreements by 8/19, TPs by 8/21.

# gNB-DU Cell Resource Configuration for IAB

**Source**: R1-2005316

**Background:** For paired spectrum, RAN1#100b-e reached the following agreement [1]:

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| Agreements For paired spectrum, the DU resource configuration framework is extended with the following:  Two separate per-cell D/U/F and H/S/NA configurations are provided for DL and UL respectively.  Whether this signalling is supported in Rel-16 is up to RAN3 and no additional specification impact is considered in RAN1 in Rel-16 for IAB operation in paired spectrum. |

RAN3[2] has accordingly provided the signaling related to D/U/F and H/S/NA configurations for DL and UL respectively in paired spectrum. The signaling are called “**gNB-DU Cell Resource Configuration-FDD-DL**” and “**gNB-DU Cell Resource Configuration-FDD-UL**”. Meanwhile, RAN3 also updated the signaling for unpaired spectrum to “**gNB-DU Cell Resource Configuration-TDD**”.

**FL Conclusion 1:** This issue can be addressed in a straightforward manner for unpaired spectrum an editorial update to TS 38.213:

* Rename the parameter “IAB-DU-Resource-Configuration-TDD-Config” in 38.213 to “gNB-DU Cell Resource Configuration-TDD”.

For paired spectrum the following alternatives can be considered:

**Alt. 1.** No updates to 38.213 – FDD resource configuration is transparent to RAN1 specs (Strict interpretation of RAN1#100b agreement)

**Alt. 2.** General update of 38.213 Section 14 with description of “gNB-DU Cell Resource Configuration-FDD-DL” and “gNB-DU Cell Resource Configuration-FDD-UL” as applicable for paired spectrum operation instead of “gNB-DU Cell Resource Configuration-TDD” (left up to the editor for the specific text)

**Alt. 3.** More details of the usage of “gNB-DU Cell Resource Configuration-FDD-DL” and “gNB-DU Cell Resource Configuration-FDD-UL” are provided in 38.213 to avoid potential ambiguity (e.g. as suggested by R1-2005316):

*The IAB-DU can assume a same SCS configuration for availabilityCombinations for IAB-DU downlink of a serving cell as an SCS configuration provided by gNB-DU Cell Resource Configuration-FDD-DL for the serving cell, and a same SCS configuration for availabilityCombinations for IAB-DU uplink of a serving cell as an SCS configuration provided by gNB-DU Cell Resource Configuration-FDD-UL for the serving cell.*

**Discussion:**

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| **Company** | **Do you agree with FL Conclusion 1? For paired spectrum which alternative is preferred?** | **Comments** |
| ZTE, Sanechips | Agree with conclusion 1.  Support Alt-1 for paired spectrum. | Given RAN1 decided in initial discussion phase not to introduce additional behaviors for DU resource framework in paired spectrum, there seems no need to introduce the two RAN3 terminologies (for DL and UL respectively) into RAN1 spec, where there is no behavior depending on these two terminologies. Alt-3 may even make the RAN1 spec incomplete if RAN1 spec would then only talk about SCS of DCI 2\_5 indication but miss the bitmap for allocations of DL slot and UL slot. |
| Qualcomm | Agree with FL Conclusion 1.  Support Alt-3 for paired spectrum. | Since RAN3 has defined the additional parameters it makes sense to add in 38.213 the description of how they should be used in the context of the already defined RAN1 behavior, in order to have coherent specifications. |
| LG | Agree with FL Conclusion 1.  Support Alt-1 for paired spectrum. | As Nokia pointed out in the preparation phase, we have an agreement regarding this issue “….no additional specification impact is considered in RAN1 in Rel-16 for IAB operation in paired spectrum.” |
| Ericsson | Agree with Conclusion 1 and support Alt. 1. | We do not see a need to update 38.213 regarding semi-static FDD resource configuration. |
| Nokia | Agree with conclusion 1.  Support Alt.1 | As mentioned by the previous agreement before, we like to avoid additional spec impacts to RAN1 specs. |
| Intel | Agree with FL Conclusion 1.  Support Alt-1 for pared spectrum. | Agree with ZTE, LG, Ericsson, Nokia. |
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# Summary

TBD